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Author:
New York (State) Governor's Commission...
Title:
Less unemployment through stabilization of...
Place:
[Albany]
Date:
[1930]

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New York (State) Committee on stabilization of industry for the prevention of unemployment.
Less unemployment through stabilization of operations; a report to Franklin D. Roosevelt, Governor of the state of New York, by the Committee on stabilization of industry for the prevention of unemployment. [Albany, Lyon, 1930.
cover-title, 96 p. diagrs. 23 cm.

RESTRICTIONS ON USE:

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FILM SIZE: 35mm REDUCTION RATIO: 12x IMAGE PLACEMENT: IA (IIA) IB IIB

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LESS UNEMPLOYMENT

THROUGH STABILIZATION OF OPERATIONS

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A Report to

FRANKLIN D. ROOSEVELT,
GOVERNOR OF THE STATE OF NEW YORK

by

THE COMMITTEE ON STABILIZATION OF
INDUSTRY FOR THE PREVENTION
OF UNEMPLOYMENT

November
1930

WE THOUGHT THIS WOULD BE OF
INTEREST TO YOU
AMERICAN MANAGEMENT ASSOCIATION

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PART I

STABILIZED EMPLOYMENT

REPORT TO HONORABLE FRANKLIN D. ROOSEVELT,
GOVERNOR OF THE STATE OF NEW YORK

SUBMITTED BY

COMMITTEE ON STABILIZATION OF INDUSTRY FOR THE
PREVENTION OF UNEMPLOYMENT

NOVEMBER 13, 1930

This report consists of two Parts, Part I which follows, and Part II separately printed, containing descriptions of various stabilization practices and insurance used in industry to mitigate the effects of unemployment.

The Commission desires to acknowledge the cooperation of Professor Paul H. Douglas of the University of Chicago, in the preparation of its reports and in the conduct of its studies. The services of Professor Douglas were made available to the Commission through the courtesy of the Swarthmore Unemployment Study, Swarthmore College.

The Commission also wishes to express its appreciation to Miss Beulah Amidon of the Survey Associates, Inc., Miss Grace Pugh of the Metropolitan Life, and Miss M. M. Hunt of the Bowery Savings Bank for editorial assistance.

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REPORT OF THE NEW YORK COMMISSION ON REDUCING UNEMPLOYMENT THROUGH STABILIZING INDUSTRY NOVEMBER 13, 1930

Unemployment relief which will provide the means of subsistence for millions of jobless men and their families has this fall become a national problem. These emergency measures are frankly palliatives, not cures. More and more it is felt that industrial unemployment is a matter to which continuing effort and attention must be given and to which constructive planning and study must be applied. From the viewpoint of business and the community, quite apart from the human suffering involved, unemployment represents waste and a bar to progress. Industrial and business leaders and government officials in this country are recognizing this fact, even as they rally all their forces to meet the present need for relief.

New York was the first State to appoint a commission to coordinate, on a State-wide basis, constructive efforts to stabilize business and reduce unemployment. The commission has been in existence since March, 1930, and is now rendering its second report. During the spring and summer, we have held conferences with business men and manufacturers in industrial centers of the State. We have collected information on stabilization projects, studied the experience of other countries as well as our own, encouraged the organization of community groups to deal locally with problems of employment and unemployment. In the months between last winter's depression and this fall's emergency, we have canvassed the questions of regularization, of needed community organization, and of security for the worker.

This report is presented with two purposes in mind; first, to summarize the results of the commission's inquiries; second, to make available to the citizens of this State and particularly to business men, industrialists and public officials, a brief analysis of the causes of unemployment, a statement of the most hopeful means as yet developed by business of regularizing both production and employment, and a discussion of what should be done by industry and by government to ease the burden of unavoidable joblessness which must now be borne by the worker and his dependents.

Our experience leads us to believe that any adequate facing of industrial unemployment must include: regularization of industry, to cut down the amount of unemployment; a thoroughly organized labor market, to cut down the duration of unemployment; some measure of security, to tide the worker and his dependents over the periods when, through no fault of his own, he is unable to find a job.

The report concludes with seven specific recommendations for furthering such a program through constructive action by the industries, the communities and the government of the State and Nation. These recommendations cover: first, concerted expert attack on the problem of regularization through managerial effort, through local committees, through a consulting staff attached to the Department of Labor, and through a State planning board which would schedule public works to help take up the slack of private industry; second, an adequate, coordinated system of public employment agencies, and more thorough supervision of private agencies; third, a study of the whole problem of stabilization of income for the worker, by a competent official body.

HENRY BRUÈRE, *Chairman,*
ERNEST G. DRAPER,
MAXWELL S. WHEELER,
JOHN SULLIVAN,
HENRY H. STEBBINS, JR.,
FRANCES PERKINS, *Industrial Commissioner ex officio.*

PAUL H. DOUGLAS, *Technical Advisor,*
GENEVIEVE B. EARLE, *Secretary.*

His Excellency FRANKLIN D. ROOSEVELT, Governor of the State of New York, Albany, New York

SIR: This report contains a discussion of efforts made by Industry to stabilize operations and analyzes the problems involved in regularizing employment, particularly during periods of depression. The report was prepared after an extensive inquiry among employers not only in the State of New York but throughout the country regarding stabilization practices which they have developed. It is also based on information obtained by us in a series of conferences held with employers and leaders of public opinion in various parts of the State during the past six months.

In addition to describing the efforts and practices of private industry, we call particular attention to the importance of developing programs of public works so that such expenditures may be increased in times of depression with a view to stabilizing employment and assisting in maintaining purchasing power.

We find that great progress is being made by American industry to overcome wide fluctuation in employment, and that in the present methods of management control, involving scientifically planned and enforced budgetary practices, there is promise of a very large contribution to the solution of the recurring problem of acute unemployment.

Even the best management, however, could not completely meet the situation. We believe, therefore, that further study should be given to other aspects of the question, such as provision against the distress which inevitably results to every working man and his family from long periods of enforced idleness. It is apparent to all that the problem of unemployment has gripped public attention in America as never before, and that the American people are eager to find a way to deal with this question wisely and constructively.

Part One of the report contains a general statement of the information and suggestions that the Commission has to present for your consideration. Part Two contains a detailed description of stabilizing and insurance practices with which American industries are attacking the unemployment problems. We believe that this material will be of value not only in further consideration of the problems by the Government of the State of New York, but by official and unofficial commissions and committees throughout the nation that are now eager to promote lasting, constructive action in respect of this great evil.

Respectfully submitted

HENRY BRUERE, *Chairman,*
ERNEST G. DRAPER,
MAXWELL S. WHEELER,
JOHN SULLIVAN,
HENRY H. STEBBINS, Jr.,
FRANCES PERKINS, *ex officio as Industrial Commissioner*

GENEVIEVE B. EARLE, *Secretary*

Governor's Committee on Stabilization of Industry for the Prevention of Unemployment.

Albany, November 13, 1930

CHIEF CAUSES OF UNEMPLOYMENT

The chief types of unemployment are four: seasonal, cyclical, technological, and chronic. Seasonal unemployment seems to be the principal single cause of the total volume and is occasioned either by uneven purchasing by ultimate consumers or by weather conditions which affect production. Thus the fact that men tend to buy their clothes in spring and fall means that the retail sales are sharply peaked at these seasons. Retailers are reluctant to order clothes greatly in advance and this in turn causes factory sales to fluctuate irregularly. This affects factory production and causes men to be laid off in the idle seasons. The fact that most consumers buy their automobiles in the spring and early summer causes automobile and accessory factories to diminish their working forces during the last half of the year. And so with other industries, such as candy-making, book-printing, furniture, fertilizer and farm machinery manufacture. Fluctuations in industries producing consumers' goods create irregular demand for raw materials and spread seasonal unemployment through the textile, leather and other industries.

Most of these irregularities can be traced back to changes in the weather. These also affect production directly as well as indirectly. Canning, for example, is at present largely confined to the season when crops mature. Building and general construction is greatly reduced during the winter and this helps create alternate busy and slack seasons in wood-working, stone, cement, and glass.

Business is not regular in its course but moves through cycles of prosperity, recession, depression, and revival. At the low point in a major cycle employment in the industrial lines will range from 12 to 18 per cent less than at corresponding seasons in good years. Despite the large amount of research into the nature of the business cycle, causes of depression and boom are complex, changing and accidental, and have not been any more definitely isolated than have the causes of cancer. We do, however, know far more about ways in which we might lessen the severity of these cyclical swings than we put into effect.

Although the menace of unemployment resulting from labor-saving devices or changes in the art of manufacture may have been exaggerated in the minds of the workers affected, it is well known that improvements in technical production do cause labor displacement. While ultimately these workers may be absorbed, there frequently is an intervening period of unemployment which causes much suffering and which must be mitigated.

Chronic unemployment mainly results from the practice of individual plants maintaining a labor reserve to meet their busiest days and seasons. This may be expected to continue until a better organization of the labor market is effected which, by pooling the reserves, will release the present duplicate reserve staffs for other employment.

WHAT CAN BE DONE?

Such being the main causes of unemployment, how can we grapple with them? We should like first to emphasize the role business can play in reducing seasonal unemployment. Because consumer demand for a product is irregular it does not invariably follow that the volume of production and of employment at the factory must follow suit. The example of a large number of firms including many which we have studied in this State, shows, on the contrary, that employment can be regularized for many more products than is commonly believed. The four chief means of regularization, one or more of which are employed by many business concerns, are: I, Stimulating consumer and dealer demand during the off-season; II, Scheduling production so that employment will be fairly evenly distributed through the year despite the fluctuations in sales; III, Developing side-line and filler products for the slack seasons; IV, Using a flexible working-day rather than alternately hiring and laying off workers. Each of these methods will now be discussed in turn:

I. Stimulating Consumer and Dealer Demand in the Off-Season

At first thought this possible outlet would seem to be diminishing because of the increased practice of hand-to-mouth buying. While this is a very real obstacle, some firms have at least in part overcome it. The International Shoe Company was in the past able to secure advance orders from its dealers by guaranteeing that if prices later rose, the prices on such deliveries would not, but that if prices fell, the dealers would get the benefit of the reduction. The American Radiator Company has stimulated off-season sales by quoting winter prices, 5 per cent below those of the late summer and early fall.

Some large firms which have a dominant position in their industry have changed consumers' habits by advertising. The Hills Brothers Company, who pack Dromedary dates, have extended the holiday demand for their product by pointing out year-round possibilities for the use of dates. The Sherwin-Williams Company has conducted campaigns to stimulate fall and winter painting. The Coca Cola Company has made that drink a year-round product by constant advertising.

Small businesses cannot by themselves effect such changes in the habits of consumers but joint effort through trade associations secures results. This is shown by the campaigns of the allied paint manufacturers to build up fall and winter business and by the successful way florists have taught us to "Say It With Flowers."

It may be objected that such efforts merely transfer purchasing power and thus stabilize one industry at the cost of disorganizing others. But this overlooks the fact (1) that building up seasonal

valleys means at the same time reducing seasonal peaks. This is clear in the case of price discounts and is probably generally true even in off-season advertising. If more painting is done in the fall, it is likely in the long run that less will be done in the spring. (2) Even when the total business of a company or industry is increased and the sales of other firms diminished, these industries can in part protect themselves by fighting back with similar tactics to protect their slack seasons. The result may be a socially wasteful multiplication of advertising in some instances, but also it may mean a greater stability of operations for both industries, and hence greater regularity of employment which is the end most desired.

II. Scheduling Production

This is by far the most common device which is now being used to keep employment fairly evenly distributed through the year. Among the prominent New York companies which are using this method to regularize operations are the Eastman Kodak Co., International Harvester Co., AutoStrop Razor Co., Proctor & Gamble, Ithaca Gun Company, Sterling Engine Company, Remington-Rand Company, Remington Typewriter Co., Agfa-Ansco Co., Bausch & Lomb Optical Co., Spencer Lens Co., Neptune Meter Co., W. & L. E. Gurley Co., Sheridan Iron Works, Otis Elevator Co., Richardson-Boynton Co., Griffin Manufacturing Co., Oneida Community, Ltd., Gorham Silver Co., Kirkman & Sons, Hickey, Freeman Co., S. S. White Co., Elite Glove Co., Columbia Mills, Knox Hat Co., The Hills Bros. Co. In nearly all of these cases the following steps have been taken. (1) An estimated sales budget for the year is drawn up in advance based on past records and the reasonable prospects ahead. (2) As nearly as possible, this yearly quota is divided into twelve monthly or fifty-two weekly parts. Goods are produced in this ratio and surpluses over current sales are stored to meet the demands of the rush seasons. (3) The estimated sales quota is checked several times during the year against actual sales. If the budget proves to be above actual sales, production is diminished. If realized sales exceed the budget quotas, production is increased. If the forecasting has been competently done, however, the error from purely seasonal causes should not be large, although cyclical fluctuations will continue to cause trouble. Even when the forecasts go somewhat awry, however, production and employment is in most cases better stabilized than before the sales budget was adopted. In some cases, such as the Eastman Kodak Co., and Bausch and Lomb, the accuracy of the forecasts has resulted in a curve of employment almost identical with the planned curve and has been kept so from season to season in normal years. It is much more difficult for a factory producing numerous lines to carry through a program of planned production than for a concern producing only a few products. Estimates will have to be made for each product and the possibilities of error in forecasting will multiply with the number of different articles to be marketed. It is therefore desirable for firms when beginning a program of budgeting and regularized employment to attempt to standardize their products. Sometimes they can reduce the number of kinds with profit. This was done by the Knox Hat Co., when it began to stabilize production, and it has appreciably helped the business. Despite obvious difficulties great success in forecasting and in stabilizing has been obtained by some firms which produce a multiplicity of products. The Eastman Kodak Co., is an outstanding example of scientific control of production through sales research and budgeting and is worthy of study by every business man having a problem of irregular production and fluctuating employment.

Even when a formal budget has not been drawn up, we discovered many firms which make a practice of manufacturing to stock during the dull seasons. We have received letters from thirty-six prominent manufacturers who follow this custom in whose plants informal estimates of probable future sales were made. Doubtless many other concerns in the State, not brought to our attention, make a practice of manufacturing to stock. Regularizing production in this manner involves the necessity for coordinating sales plans and production and utilizing past experiences as a guide to future planning. It necessitates tempering optimism with caution. The attempt to regularize production in this fashion becomes, therefore, a part of the general movement to obtain better management in which every industrial investor and employee looks to management to participate.

III. Introducing Side Lines and Fillers

The historic partnership of coal and ice—an alliance badly damaged at present by the illness of the junior partner—is the classic example of this method of reducing seasonality. The International Harvester Co., has taken on a varied line to keep its factories busy the year round at the approximate level of its spring peak. The Remington Arms Co., has experimented similarly to overcome the tendency to concentrate production in the fall. The Welch Grape Juice Co., by adding jelly and a fountain syrup to its line of grape juice and grape spread, have been able to prolong employment. The Beechnut Co., by packing peanut butter and other products, has greatly modified the alternate floods and droughts which normally characterize most food-packing industries. The New York Quinine and Chemical Works is also able to produce fairly steadily during the year because its products have different seasonal peaks. Even in the clothing industry seasonal fluctuations have been coped with by some firms. The Dutchess Mfg. Co. makes up standard boys' garments when the season is slack for other garments, and the H. A. Dix Co. manufactures nurses' dresses and uniforms during the months when its line of house dresses is in little demand. It is not enough, however, merely to develop side lines in order to maintain steady em-

ployment. It is also necessary to transfer workers from the main products to the fillers and this in many cases requires additional training. The Michael-Stearns and Hickey, Freeman Co., of Rochester, have both developed such flexibility to a very high degree.

In developing side lines, care is taken to select products which are adapted to the company's machinery, fixed capital, its sales policy and the skill of its workers. It would, for example, be ridiculous for an ice cream manufacturer to produce sleds because the seasons for the two dove-tailed. But it would be highly sensible for him to make candy to take up the slack of the winter months. In other words, the new product must be such as can in general be made with the same machinery, marketed by the same selling force, and manufactured at not too great cost approximately by the same working force. To determine what new products should thus be taken on, calls for a very high quality of management. Not only must engineering knowledge be applied to determine the fitness of the plan for the product to question but the sales opportunities must be carefully analyzed as well.

IV. Using the Flexible Working Day Instead of the Lay-Off

This method of meeting the seasonal peaks is used by the Delaware & Hudson Railway when the working time is varied between 8 and 10 hours a day according to the demands of business. In this way permanent workers put in up to 10 or 12 hours extra a week to handle the fall increase in traffic, and at other times work only 48 hours, and sometimes only 32 hours a week. This practice is used in one form or another by a number of plants, including many canneries and the National Cloak and Suit Co., and has much to recommend it. If the total yearly hours are not excessive, it is better for a constant number of workers to be employed for a flexible number of hours per week than for a very fluctuating number of workers to be employed for a constant number of hours per week. The plan, has, however, two dangers: (a) ability to work employees overtime during the rush seasons may discourage employers from trying to iron out fluctuations in production and hence lessen the possibility of evening the number of man-hours worked and earnings received in the respective months, (b) overtime in some cases may be excessive and cause undue fatigue. Such a policy will, therefore, be better for a plant with a 44 or 48 hour basic week than for one where the standard week is already 54 or 60 hours. It is also desirable that overtime work should not be carried on for too long a time.

Many firms believe that such policies as we have mapped out while socially desirable, would not pay them individually because of the added storage and interest charges which planned production entails. It is the common practice of most business men who have not yet regularized their employment to use this argument as an excuse for their own inertia. The firms, however, which

have regularized production find that such a program has brought economies which decidedly outweigh the costs. These economies are of four main kinds: (1) The costs of hiring and maintaining large numbers of untrained workers for short periods of time. It is costly to hire new workers to meet the peak periods since they are unaccustomed to the work. In consequence in all save unskilled work, the newly hired employee will on the average have low production and high spoilage. A New York manufacturing firm has stated to us that it finds "new employees," even though they are what is known to the trade as skilled mechanics, are not even 40 per cent efficient for the first six months. Another manufacturer who has stabilized production writes that in his opinion "it is impossible to produce the goods as fast as they are sold during the season. If one does, it means overtime, high pressure and poor work with the consequent loss of sales by not having the goods ready when wanted, and also having a loss of customers on account of poor work due to high pressure and green help. This surely is not good business and such a loss amounts to more than the loss of interest on money represented by goods held in store."

By keeping steady work all the year round costs are reduced by having experienced workers turn out the product. With the stability of jobs assured the only part of labor turnover which remains is that due to the instability of men.

(2) By reducing the fixed capital charge per unit of product, if an appreciable increase is made in the working force to meet seasonal peaks, additional capital in the form of machinery and floor space must be provided. When the busy season passes, men can be laid off but not capital. Interest and depreciation charges upon this idle capital will have to be met out of the product of the occupied portion and unit costs will be higher than if the capital were fully employed throughout the year. It thus becomes possible through regularization to turn out the same annual output with a smaller quantity of fixed capital, and so reduce interest charges for this form of capital. One New York concern stated this advantage: "If we produce at the same rate that our goods are sold, our factory would have to be equipped to handle our maximum demand. During slow periods, our machinery would be idle or working at a small percentage capacity. Our factory is not equipped to handle our business during peak seasons. We know that together with less space now required, we effect considerable savings."

Another firm stated to the commission that it was able to meet its peak load with a plant which was one-fourth smaller than it would have been had they produced stock during the months when sales were slack.

It may be objected to this that since most firms already have capital equipment to care for their peak load, regularization of output would merely mean that a portion of the plant would be idle throughout the year instead of its being entirely used at some periods and much less at others. Regularization, it is thus claimed, would neither reduce the total of fixed charges nor the amount for each unit of output.

But such a contention ignores the fact that a business can contract its total capacity by not replacing machines which depreciate or become obsolete and in many cases by disposing of some of its floor space to other firms. Even if the volume of business remains constant, establishments can through regularization reduce their unit costs. If their business expands, they can provide for this growth factor from what would otherwise have been the unused capital equipment in the slack months. In short, while the policy of regularization will generally mean an increase in the cost of providing working capital, it will also mean a decrease in the cost of fixed capital. While more space will have to be provided in the warehouse, less space will have to be provided in the factory. And the savings in the latter are likely to be appreciably greater than the losses in the former since factory space is filled with costly machinery and therefore has a higher value per cubic foot than warehouse facilities. On the other hand there is often a substantial interest loss on high value goods and in such cases there may be no business justification for regularizing output. No general rules can be framed to apply to all cases.

(3) Where work is irregular and uncertain, firms find it necessary to pay an hourly rate above the average in order to attract an adequate and fairly competent staff of workers. Workers want security and assurance of regular work and all but the reckless or shiftless generally prefer to work for a firm which gives continuous employment than for others whose hourly rates may be somewhat higher but where the workers are never sure of next week's work. Regularization should therefore mean lower unit labor costs as well as lower fixed capital charges. One company reported to us that because it gave steady employment, it was able to pay an hourly rate which was 10 to 15 per cent below the market average.

In these gains labor benefits as well as employers. The greater volume of employment during the year appreciably outbalances the lower hourly rate. The worker thus obtains an increased annual income at the same time that the employer reduces his unit costs.

(4) Regularization lessens the conscious and unconscious restriction of output on the part of the workers. In industries where work is irregular it is the almost universal tendency for employees to slacken their efforts as they see off-seasons approaching. By reducing their effectiveness they can make such work as they have last longer and can postpone the day when they are unemployed. Next to the fear of having the piece-rate cut, the fear of unemployment is probably the chief cause of withheld effort. The evil effects of unemployment are therefore only partly visible; like an iceberg they lie mostly below the surface.

This tendency to soldier on the job may be partially checked by efficiency systems and by piece-rates, but as long as the workers have unemployment to fear, it will continue. Regularization would mean the elimination of most of the important causes of unemployment—namely, the seasonal factor and by assuring the workers of their jobs would enable them to work harder without fear of "working themselves out of a job."

There is much reason, therefore, for business to set itself vigorously to the task of regularizing production. The social need, the economic advantages, and the practical methods of stabilization must be called to the attention of business managers everywhere. Those who seek to reduce unemployment should seek the cordial interest and cooperation of employers. That is one of the chief tasks which we have set ourselves and by means of conferences in various cities of the State, we have sought to stir the interest of business men in the practical achievement of those who come to these conferences to describe the successful methods of stabilization which they follow. Trade associations and local chambers of commerce might well make stabilization of operations one of their major concerns. Some have done so, notably the Rochester Chamber. Trade associations particularly, should study the problems of their individual industries with a view to determining how production and employment can best be regularized. The State could be of service to small businesses which cannot afford a specialized research staff, by having two or more competent industrial engineers or experienced administrators who will place their knowledge and experience at the disposal of plants which wish to regularize. Such experts should under no conditions be political appointees but should be secured after consultation with well-recognized associations of engineers and managers. Under such safeguards we believe that a competent advisory staff could be of great service to industry and labor in the State. We recommend that it be attached to the Department of Labor.

ALL UNEMPLOYMENT CANNOT BE CURED BY REGULARIZATION

We would be guilty of false optimism, however, if we were to conclude that all industries can be regularized by such methods. If one classifies the industries which have been able to put into effect production to stock under planned policies, one finds that they fall into one or more of the following classes: (1) those producing a standardized product such as soap, dates, silverware, standard parts, etc. Soap may be stored during the winter for summer sales with no fear on the part of the manufacturer that by that time it will out of style; (2) those with highly skilled workers where it is very important to retain a steady staff such as measuring instruments, optical works, etc.; (3) those where the product is quasi-monopolized and where the manufacturer can accordingly resist pressure from dealers; (4) those where storage costs per dollar of value are not excessively high. Such industries are important but there are many others which do not fall into these four categories. In those which do not, the elimination of seasonal fluctuations is at present almost impossible.

This is particularly true in industries where styles change rapidly, as in the manufacture of clothing and shoes and more particularly in the women's branches of both of these industries. Women's clothing stocks are almost as perishable as radishes or celery. A style which seems good one week may be displaced by another the following week. In an industry such as this, with small and highly competitive plants, it is suicide for a firm to manufacture goods to stock. A manufacturer must instead produce after the orders have been given him by retailers or jobbers. With the increase of hand-to-mouth buying, the volume of individual orders is becoming smaller and the time allowed for delivery shorter. Some relief might be found by following the H. A. Dix Co., which manufactures standardized garments during the slack seasons, but as the desire for more individualized dress on the part of women increases, the practicability of this outlet has steadily diminished. Women's shoes have become almost as disorganized in their styles as women's clothing, and the increase of the style factor has compelled the International Shoe Company largely to abandon its former program of stabilization.

WEATHER CHANGES WILL CONTINUE TO CAUSE UNEMPLOYMENT

It is also true that while we can mitigate, we cannot entirely remove the direct influence of the weather in causing unemployment. More building is now done in the winter than was formerly believed possible, but even at best the inclemincies of winter weather in this State will always cause a considerable amount of unemployment. Such stoppage of work will not only affect workers in the building trades but will cause irregularities in industries producing building materials. Such goods are bulky and have high storage costs. This will continue to serve as a deterent against large quantities being produced to stock. The canning of food can be better regularized than it is today but it is idle to hope that in the predictable future all unevenness can be ironed away.

We must, therefore, face the fact that while good management can reduce it cannot cure seasonal unemployment and that even if industry were to set itself to the task with far more energy than it has shown in the past a considerable amount of seasonal unemployment would exist.

CYCLICAL UNEMPLOYMENT

During periods of cyclical unemployment individual firms are to a large degree helpless to overcome the numerous factors that create depression. Some business men have argued that by indulging in more advertising during depressions and by releasing new products, stabilization can be effected. But such a policy at best can only be practiced by firms producing specialty goods. It is patently impracticable for producers of standardized consumers'

goods or of capital goods who are of course most severely hit by periods of depression. Furthermore, the increase in business which the specialty firm may obtain is primarily at the expense of other industries and hence does not help in the general solution. The ultimate control of the business cycle is in our opinion still a long way off. It probably involves some form of international action governing the supply of money and credit which will stabilize the general price level and so prevent those fluctuations which encourage business to peak activity during periods of prosperity and discourage it from production during periods of depression.

The state and municipal governments are not as helpless in these emergencies as are private industries. They can time their public works so that an appreciable volume of additional work can be undertaken as private business slackens. In order to do this adequately, however, it is necessary for the state and the municipalities to draw up long-time programs of improvements and to obtain authorizations for the necessary bond issue. Considerable progress has been made in framing such programs for the State and for certain branches of the city governments in the State, but there needs to be a general adoption of the idea by all the municipalities. As a depression approaches the state and local authorities could accelerate construction and thus afford a considerable measure of relief. In order to do this effectively, however, there should be coordinated action on the part of the state and municipalities and we suggest that the State government assume the initiative in setting up a State planning board which will be headed by the State Director of Public Works and include the responsible executives of the chief cities and counties of the State.

Added construction by private business during periods of depression will also be of assistance. Because of lower material and labor costs and the lower rates of interest such a policy will in many cases prove to be actually economical for the large enterprises.

It has been a common practice during this depression for firms to work the major portion of their force part-time instead of laying off a large portion completely and having the remainder work full-time. Out of 598 firms with a total force of 180,000 which replied to a questionnaire we addressed to 1,400 manufacturing concerns, 157 employing 61,000 workers explicitly stated that they were following this policy. This sharing of work during periods of depression we heartily endorse. Less hardship is occasioned the employed group by having their incomes somewhat reduced than for some to be totally deprived of earnings, and employers are enabled to keep their forces more nearly intact for the period of revival which sooner or later must follow.

TECHNOLOGICAL UNEMPLOYMENT

While ultimately the workers displaced by improvements in machinery or in management may find work, the intervening

period of unemployment is likely to be onerous and when new work is found it is often at a sacrifice in earnings.

Ways must be found therefore to lighten the burden which society now compels the workers to bear alone as the price of industrial progress. The following methods are now being used by some concerns and deserve to be much more widely copied. Technological changes are planned especially with a view to minimizing the resulting displacement of labor; improvements are introduced gradually instead of in revolutionary fashion and are especially furthered during periods of prosperity. (2) When it is necessary to reduce the working force because of technical changes such reduction is affected by not replacing normal losses due to death, superannuation, separation, etc., rather than through outright dismissal. This is the policy followed by the Baltimore & Ohio R. R. (3) A dismissal wage is paid to those who are dropped because of technical and administrative changes. This is done by the John A. Manning Co., the Delaware & Hudson R. R., and has been paid under certain circumstances by Hart, Schaffner and Marx, and the United States Rubber Co. While these dismissal wage payments should be adequate in amount they need be paid only in cases of dismissal for lack of work.

In addition, society can and should provide at least three other services which will help ease the worker's transition from declining to expanding industries: (a) Competent and impartial agencies, preferably governmental, should issue from time to time forecasts of those industries where, because of impending technical changes and an inelastic demand for the commodity, a decline in the number of workers is imminent. Such information, judiciously distributed, would restrain many young people from entering industries on the downward tread, and would lead others to leave them as opportunities arose elsewhere. (b) Displaced workers should be re-educated for work in other lines and especially for such occupations as they may be fitted for in the expanding industries. (c) An adequate system of public employment offices to facilitate finding work for those displaced.

PUBLIC EMPLOYMENT OFFICES AND CHRONIC UNEMPLOYMENT

Logically, an all-inclusive state employment service, by pooling the labor reserves, should diminish the idle surpluses which tend to be retained by individual firms and industries. An employment service could thus help decasualize many workers and diminish unemployment. By centralizing applications for men and for work, it could also reduce time lost by workers between jobs. It would free workers from high fees charged by private agencies and would tend to remove the frequent abuse of splitting such fees between foremen and agencies, a practice which induces arbitrary firing. It would moreover give supplementary services to groups such as juveniles, women and the older employees who would otherwise be inadequately aided.

We must be frank to say, however, that the development of the public employment offices has not in the past been such as to realize these possibilities. Part of this failure has been due to inadequate funds but part has also been caused by a lack of interest and competence on the part of the staff which has until recently existed. As a result of the survey conducted by an advisory committee appointed by the Industrial Commissioner, Frances Perkins, the management of the state public employment offices has been changed and improved methods adopted. The improvement which resulted was evidenced by increase in placements from an average of 4,800 in January and February, to 8,600 in April, 10,400 in May and 7,600 in June, 1930. This betterment was effected in the face of a falling labor market. This committee believes that the public employment service should be furnished with additional funds and that advisory committees of employers and workers should be created to cooperate with them in the different cities where there are offices. The practice of associating industry and employee representatives in the management of the offices should tend to popularize them by improving their opportunity to secure openings for competent workers. The New York labor market is now broader than the confines of the State itself. Our business establishments draw workers from all parts of the Atlantic seaboard and from other regions of the country as well. Our workers in turn frequently seek work in other states. There is need, therefore, of a vigorous and effective federated system of state employment offices which will manage inter-state clearances of labor and which will promote efficient employment work in other states. This is the type of system contemplated in the bill introduced in Congress by Senator Wagner of this State which, having passed the Senate, is now before the House of Representatives.

We believe that a substantial improvement in the condition of the unemployed would be effected if instead of the present chaotic and ill-supervised way in which private employment agencies are licensed by the municipalities a centralized system of state licensing and inspection were substituted.

STABILIZATION OF WAGE EARNERS' INCOMES DURING PERIODS OF DEPRESSION

We must face the fact that despite the efforts to minimize it some unemployment will continue. Good management may reduce but will not eliminate seasonal unemployment. Good management, in its zest for improvements, may on the other hand, at times increase technological unemployment. Cyclical fluctuations may be lessened in part by an intelligent public works policy, but their control lies outside the power of state and federal agencies.

Despite all efforts therefore a large number of workers and their families will continue to confront hardships from the effects of business depressions. How then may these workers and their dependents be protected against the hardships and uncertainties of

these periods? Society cannot rest until it has satisfactorily answered this question. Charity, while necessary at present, should not be the final method by which the worst effects of unemployment are alleviated. Charitable relief is often inadequate in amount and carries with it a sense of degradation which causes large groups to suffer greatly before they will ask for aid.

Several courageous plans have been launched by employers and workers to meet this problem. In the clothing and fur trades of New York City, employers and employees have set up joint insurance funds which give relief to the most needy unemployed. A similar fund has been established in the men's clothing industry of Rochester and New York. In the last few months the General Electric Company, under the leadership of its president, Mr. Gerard Swope, has initiated a comprehensive plan which has now been adopted by virtually all of the constituent works of the company. This plan calls for the payment of 1 per cent of the earnings of workers who accept the plan, matched by equal contributions by the company. While the plan does not provide for workers who are dropped from the company's employ because of lack of work it does propose to take care of those who are laid off but still retained on the rolls without pay. After a two-weeks' waiting period during which no benefit is given, the unemployed worker is paid 50 per cent of his average full-time earnings, with a maximum limit of $20 a week, for not more than ten (10) weeks during the year.

A further interesting feature of the plan is that when the expenditures from the fund are equal to its receipts, the company proposes to declare a state of emergency and thereafter every employee at the particular works affected from the manager down will contribute an added 1 per cent of his full-time earnings, irrespective of whether he is or is not a member of the plan. At such times the sales force and general administrative staff from the president down will also contribute to the fund. This practice will put some pressure on the sales and administrative staffs to get business in order to keep the plant running. The company will add an extra 1 per cent of the payroll to match the extra contributions of the workers. A maximum possible fund of 2 per cent can thus be set up.

While all of the workers will thus be liable for assessments during periods of emergency, benefits may only be paid to those who have previously agreed to have 1 per cent deducted from their earnings. Since the large majority of employees in the several plants who voted favorably for the plan automatically became members of the plan and eligible for its benefits there is a very strong incentive placed upon the remainder also to join and thus to be able to share the protection which they may be assessed to maintain. It is expected therefore that nearly all of the 88,000 employees of the company will in the not distant future come under the plan.

Such attempts as these to protect workers and their families against one of the greatest causes of misery in modern times are

worthy of all praise. They should be studied by private industry and by labor and in one form or another, whether as dismissal wages or insurance against unemployment should be widely copied. Such payments are not doles nor are they merely palliatives. In the first place they extend to labor the same type of financial protection against depressions and bad years which many well-managed companies can now give to their stockholders. Such systems will also help stabilize industry itself. The very fact that workers will have incomes which they otherwise would not receive will give them increased purchasing power in depression periods. If the success in accident prevention following the adoption of the compensation law is a criterion of what will happen when unemployment is made a direct expense to industry as it is made in the General Electric Company. There will be added incentive to reduce it and industry will turn with increased vigor to those regulatory devices which are designed to lessen seasonal fluctuations.

If reasonable stabilization of the wage-earners' incomes can be effected by voluntary action of employers and employees for the majority of the workers a great boon will result to the State. Perhaps some form of voluntary unemployment insurance can be devised and paid for by employers and workers analagous to group health and life insurance now so extensively supplied by insurance companies. If management does not bend itself to this task of stabilizing income, however, then it seems inevitable that the State will by its own initiative seek relief for the evils of unemployment as they affect the worker. We are aware that American opinion is by no means settled on the wisdom of such elaborate systems of unemployment insurance as have been adopted in England and European continental countries. It fears addition to the already extensive bureaucracies; it hesitates to dampen effort to sustain business activity, and to discourage the provision by individual workers for bad times out of savings made when times are good. On the other hand, the public conscience is not confortable when good men anxious to work are unable to find employment to support themselves and their families.

The subject needs patient, full, and fair-minded investigation. There needs to be much public discussion of the matter in the light not of prejudice nor misunderstanding nor arbitrary solutions, but of scientific inquiry and a complete searching of the facts and analysis of possible plans.

You will best know how to secure wide and thorough inquiry so as to ascertain what is most suitable for this State. The Commission has had impressed upon it, the necessity of securing, if possible, the joint consideration of the question by the leading industrial states to the end that such solutions as may seem desirable may be designed to meet the needs of the principal industrial sections of the country. The problem is one that is wider than the borders of the State and should, we think, be approached with that fact in mind.

SUMMARY AND RECOMMENDATIONS

We therefore recommend:

(1) A serious and determined effort by management to lessen seasonal fluctuations in production and in employment through well-tested methods of regularization. Trade associations, Chambers of Commerce and the State should facilitate this by supplying information and a staff which will help private enterprises to reduce seasonality. It would be desirable for the State Department of Labor to have one or more competent production engineers or experienced business men whose services could similarly be placed at the disposal of the smaller firms who wish to stabilize but who do not have a sufficiently specialized managerial staff to work out the method of doing so. In the selection of these experts, the advice of professional associations of engineers and of managers should be allowed.

(2) That management should take all possible steps to lessen the temporary unemployment which may be caused by technical and policy changes. Dismissal wages should be paid to those displaced because of impersonal forces rather than personal fault.

(3) That increased appropriations should be provided for the State Employment Service and the fullest efforts made to get the working cooperation of employers and labor in all cities where offices exist. As these offices increase in strength, an earnest effort should be made to decasualize industry by eliminating the surplus labor reserves. State licensing and inspection of private employment agencies should be substituted for municipal supervisions.

(4) That communities should organize committees to consider the problem of local unemployment. These groups can be of service in promoting the movement for regularization, in improving the local employment offices, in helping frame a public works policy, and in stimulating community action to relieve distress and to consider remedies.

(5) That there should be set up a State Planning Board to help frame a long-time program of public works for state and municipal governments and to accelerate work on this program during periods of business depression.

(6) Sharing of slack time among workers during periods of depression to the fullest degree possible rather than dismissing a portion of the employees entirely from work is a desirable practice.

(7) Adoption by industry of insurance plans which will help to stabilize the wage-earners' incomes during periods of unemployment.

(8) Full and impartial investigation of this question by a properly constituted official body to determine what can be done to supplement efforts of private industrialists and workers to protect the working people of the nation against the effects of unemployment too great for individual resources to offset.

PART II

REPORT OF GOVERNOR'S COMMITTEE ON STABILIZATION OF INDUSTRY FOR THE PREVENTION OF UNEMPLOYMENT

ILLUSTRATIONS OF WAYS OF STABILIZING INDUSTRIAL OPERATIONS AND PLANS OF UNEMPLOYMENT COMPENSATION NOVEMBER, 1930

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CHAPTER I

Instances of How Some Manufacturers Have Largely Overcome Seasonal Fluctuations

In Part I of the report submitted November 13, 1930, we described the general methods by which seasonal fluctuations in employment can be appreciably reduced by manufacturers and by industry in general. We believe that it is important to describe in some detail the experience of particular firms and to do this whenever possible in the words of the manufacturers themselves. We are therefore appending the following series of cases, which we have attempted to classify according to the main methods used. Naturally, however, in many instances more than one method was employed with a consequent over-lapping of classification. We offer these examples as evidence that the problem of seasonal fluctuations can be grappled with much more successfully than many businesses have thus far believed.

1. *Inducing a Steadier Rate of Purchasing by Means of Advertising, Sales Policies and Price Adjustments.*

Seasonal advertising, seasonal discounts, and deferred dating are among the sales management devices used to secure advance orders from the wholesaler, jobber or retailer. With a backlog of actual orders, stocks may be built up in slack periods without too great hazard. The following are examples of firms which have found such devices helpful in stabilizing employment.

SEARS, ROEBUCK AND COMPANY [1]

Chicago, Ill.

The vice-president in charge of merchandise in the Sears, Roebuck and Company of Chicago states that years ago the mail order business used to be very much depressed in January and February and in July and August. The company then studied its problem and hit upon the plan of circulating a special catalogue, smaller in size than the regular book with prices to appeal to the customers. The result was that this little catalogue not only bridged over the former dull months, but actually has been a stimulator for the larger catalogues. The official who tells of this plan confidently states "With us the 'summer slump' is now a period of big business."

NATIONAL CLOAK & SUIT COMPANY

New York

The National Cloak & Suit Company is a mail order house selling textile and women's and children's clothing. It does not do any of its own manufacturing. It employs 1,700.

The nature of its business is such that it experiences two heavy buying seasons—one from the end of September to Christmas and a shorter one before Easter. By issuing two additional catalogues—one in January for a white sale, one in June for a late Spring sale, small selling peaks in January and June have been added. This leaves its production curve with form valleys in February, May, July, August and the end of September.

[1] Taken from Feldman Regularization of Employment, pp. 181, 182.

For several years it has been making increasing efforts to transfer workers from one department to another. The white goods department in January for example absorbs workers from other departments which are slack after the Christmas business.

The packing department in the past hired a lot of full time men and boys in busy season and then fired them. At the present time it has a list of High School boys available for part time work. These names are kept in file the year around and the boys are drawn upon as needed to work outside of school hours.

As these plans were not able to take care of its stabilization problem, three years ago it inaugurated its system of long and short hours. The firm had established a 44 hour week a number of years before. Under the new plan the year is divided into two six month periods in each of which the weekly hours do not average over 44 hours a week. They range, however, from a maximum schedule of 51¼ hours from 8:30 to 6:00 daily and Saturday to 4:45 with 45 minutes for lunch to a minimum of 39 hours 8:30 to 4:15 and Saturday to 12:30 with 45 minutes for lunch. When times are especially slack it closes all day Wednesday in addition. At the beginning of each 6 month period the employees are given the schedule of hours for the entire 6 months. If at the end of the half year more than 44 hours have been averaged contrary to the schedule, either this is made up in the next 6 months period or employees on part time and one half for over time. Workers are paid by the week and their wages remain the same throughout the period.

The plan provides for a variation of over 30% in volume of business without change in working force. In 1920 there was a difference of over 1,000 between the Easter peak and the mid-summer slump and of over 800 between the latter and the Christmas peak. In 1924 these fluctuations were reduced by one-half.

C. F. MUELLER MACARONI COMPANY[1]

The development of more regular purchase of noodles and macaroni is a case in point. An executive in the industry states that formerly people would not buy this product in summer. The reason was that it was sold in open paper packages loosely wrapped and the boll weevil inside the noodle would be developed by warm and moist weather. This spoilage could have been avoided by the right packing. In 1909, the C. F. Mueller Macaroni Company purchased the right from the National Biscuit Company to use the In-Er-Seal package, at that time patented. This package is air-tight and keeps the moisture out. By improving the product at the same time, the chief obstacles to the sale of macaroni in summer months were removed. Then, by sales promotion and good advertising appeals, the company fought its way through the strong prejudice that existed against such goods and eventually achieved a substantial warm-weather demand. Similar prejudices against summer purchases have been overcome by manufacturers of the better grades of canned soups and of other canned goods.

TAO TEA COMPANY, INC.[2]

Sales in tea ordinarily fall off 30% to 40% for three months in the summer. Tao Tea Company, because of sheer inability to stand a falling off in business, was forced to keep summer business up to normal. In the fall of 1922 it started to market a speciality—tea balls. The idea was novel to consumers and distributors and marketing proved difficult.

In May $25,000 was appropriated for advertising. Before advertising was issued, fifteen salesmen demonstrated the possibility of making iced tea with cold water which kept all the natural aroma. Before an advertisement had appeared, increased orders nearly covered the cost. In July business which normally should have fallen off 30% increased 6%; in August sales increased 23% while other tea companies accepted a slump of 30 to 49%. In

[1] Taken from Feldman, Regularization of Employment, p. 177.
[2] Taken from an article in System, July, 1924, pp. 40, 41, 101.

September sales increased 55%, although competitive sales were still off 25% to 30% according to the firm's investigators. Efforts were confined to New England and New York.

The next year the methods were repeated over the entire country with equally good results.

HILLS BROTHERS COMPANY[1]

The case of the Hills Brothers Company is unique in the ease with which it transformed production from a highly seasonal basis to a much more even level. This company is an importer and packer of dates which it packs under the brand name of Dromedary Dates. It has a packing station in Basra, Mesopotamia, at the head of the Persian Gulf. The crop of dates matures in September, is packed in 70 lb. boxes and then transported by steamers to a factory in Brooklyn, New York. There the dates are unpacked, cleaned and sterilized and repacked in small cartons, in which form they are sold to the trade. Because of the nature of the crop it is inevitable that the raw material for a whole year's production must arrive at the Brooklyn factory from Mesopotamia between the months of October and January of each year.

As the greatest demand for dates is from September to January, it was customary in the old days to pack in a small way during the first part of the year and then to concentrate upon high speed production during the last four months. This meant an average working force during the first eight months of about two hundred employees (most of whom were not busy in packing dates but engaged in other operations around the plant) and an average force during the last four months of eleven hundred employees. The wrench involved in expanding a working force overnight, so to speak from two hundred to eleven hundred, is apparent. For years the Company struggled to keep up with the demand for its product which became so insistent in the fall. In attempting to meet this demand there was a temptation to lower the quality of packing and in other ways to encourage wasteful methods which are bound to creep in under forced draft production.

Finally, conditions became so critical that the executives determined upon a drastic change of policy. Their chemists told them that if, upon arrival, the raw material was placed in cold storage, it would keep indefinitely, provided the proper temperatures to be maintained were determined beforehand. Accordingly, the Company erected a cold storage warehouse adjoining its packing plant. It purchased raw material which would supply not only the fall demand but the following year's demand as well. In 1921 the new plan was tried, but only in an experimental way. The experiment proved successful. Dates packed in January were taken out of cold storage in September and found to be in perfect condition.

In the following year of 1922, a much larger quantity was packed during the first half of the year and for, the first time in six years, the supply of Dromedary Dates during the rush season was equal to the demand. After this successful experience, the Company awoke to a realization of the great savings which could be effected in attacking the problem from a production standpoint. In the past practically no attention had been paid to the kind of labor employed or its effectiveness during employment. The best way to meet such a situation was to establish a personnel department. This the Company did and procured the services of a college woman who had had some personnel experience with department store employees, to take charge of the new work.

One of the first needs which became apparent was that of additional lines during the off season for dates. The Company already had a satisfactory sale in package shredded cocoanut which was a fairly steady seller throughout the year. But this product did not fully solve the problem. Spring and summer were the weak months. So canned figs in syrup for the spring months were added, and for the summer months, canned grapefruit hearts. Also,

[1] Taken from Lewisohn, Draper, Commons, Lescohier—Can Business Prevent Unemployment, pp. 16–21.

sliced citron in package form was added to the line for use in the holiday seasons, and later.

All this happened three years ago (1922). It is natural to ask: "How about the situation today? What has been the effect of this stabilized production upon the Company's net profits, upon the employees and upon the product itself?" The answer is, first, that the Company's net profits have increased. It is true that production costs have risen slightly, for a reason to be explained shortly. On the other hand, it is also true that in the first and second years of the full stabilization of the Company's chief product (dates) the superior quality of the product plus a certain amount of judicious advertising, developed a larger scale with much fewer returned goods, so that the increased production cost was more than offset by the increased sale to ultimate consumers. Other methods were effected in the purchase of supplies, methods of packing, and in other ways.

The effect of this new program upon the employees has apparently been successful from every standpoint. Most of the date packers are piece workers. These packers are now assured a practically continuous working period throughout the year as constrasted with the situation in the old days, when there was no work to speak of during the first eight months of the year, and then excessive work during the fall and winter. In addition to this steady work, the company arbitrarily raised all piece rates. It did this in order to leave no stone unturned in drastically improving the quality of the product; and it was the arbitrary raise in wages which largely accounted for the increase in production costs mentioned previously. Roughly speaking, this raise in wages, plus regular work throughout the year, has made an increase in the income of steady piece workers amounting to 30% over and above their former yearly earnings.

We can describe in one sentence the effect of stabilized production of dates upon the quality of the product. This quality has improved to a marked degree.

PURINA MILLS

St. Louis, Mo.

"With regard to our own experience I can say that ten years ago our business was distinctly seasonal, and we even went to the length of discontinuing salesmen during dull periods or shifting them from one part of the country to another.

"At the present time (1925), we have no such thing as "seasonal slumps" and while some months are slightly higher than others our tonnage rarely varies more than fifteen per cent to twenty per cent between the highest and lowest months of the year.

"This has been due largely to two things. The first and most important was the development of kindred products naturally marketed in large volume during what was our individual slump period. We put extra sales and advertising pressure on these products until we had practically filled the valleys on our tonnage chart.

"The second factor which was not of equal importance but which did not have an important place in our program was the development of salesman and dealer contests to put on extra sales pressure during our slump periods. This has been done so successfully that we believe it would have filled some of the valleys without the development of special products."

BROWN & BIGELOW

St. Paul

"The biggest unit of our business is still calendars, in which we started. During the past twenty-nine years we have progressively advanced the selling season so we start our salesmen December 26th of this year (1925) selling calendars which will carry 1927 pads. We sell them all during 1926 also until close to the end of the year when manufacturing considerations cause the withdrawal of the calendar line from sale. We put on a sales contest during our first intense calendar selling season, which gives us orders to manufacture against during the entire year.

"We run Specialized Weeks from time to time to make our salesmen train themselves on selling a particular item or class of items and also to help the Manufacturing Department, which turns them out.

"This year during May we had a Quota Contest which we called our "Round-the-World Flight Sales Contest." A man's quota represented 25,000 around the world, so he needed to make 1,000, or 1/25th of his quota every working day during the month.

"We are now in our 19th Annual Baseball Contest, which is very successful so far.

"Our next intense selling season will be during the late Summer and Fall for Christmas articles and following that we have a Spring Shipment Contest. Only sales for shipment during the early months of the year count in this contest. This gives an artificial sales stimulus which makes our 350 salesmen turn in more business, but it is also very vital to the Manufacturing Department, because it produces business to manufacture during what is otherwise the poorest time of the year."

IVES MANUFACTURING COMPANY[1]

"An executive of the Ives Manufacturing Company relates that until about twelve years ago the company's salesmen were idle the first six months of the year. When he began his first trip early in June to sell toys to the trade, this experiment was considered a doubtful one because about a month too early. But the success achieved resulted in starting all the salesmen at about that time in the following year. The next year precedents were again broken by moving the date back to March. Even this date was improved upon, and now the firm calls on every customer in town in January. The company secured a large proportion of its orders for the Christmas of 1921 in the early part of the year.

"Excellent reasons can be used in persuading the customer to order in advance. In the case of the Ives Company, one of the advantages urged is that when the dealer orders right after the Christmas season, all the impressions of the requirements are in his mind. His stock is not yet stored away. He is not likely, therefore, to forget any goods left over, while the recollection of an inadequate supply of some popular item suggests a need that might otherwise be overlooked. The dealer who could not secure some goods he could have sold because he had not ordered in time is cautioned that by delaying he may suffer the same experience during the next holiday season."

THE AMERICAN RADIATOR CO.[2]

In order to help even out the flow of orders and of production, the American Radiator Company introduced a system of prices to its dealers which were graduated according to the season at which delivery was made. The prices for the months of February, March and April were taken as the base. These were increased at one time by 2½ per cent for shipments made during May, June and July, and by a further 2½ per cent for the peak months of August, September and October. During the next quarter, the price scale was then reduced by 2½ per cent to the level of May, June and July, and the yearly rhythm was resumed by dropping prices back 2½ per cent more for February, March and April shipments. At other times the amount of the seasonal differential varied, and at one period the ratios were:

Months	*Relative Price*
Feb.-March-April	100.00
May-June	102.25
July-August	105.25
Sept.-Oct.-Nov.	108.50

This price policy distinctly reduced the amplitude of the monthly fluctuations in sales and deliveries. Thus R. B. Flershem, the sales manager of the Company, stated that[1]. In the previous years the normal October was four

[1] Feldman—Regularization of Employment, p. 185.
[2] R. B. Flershem, *Sales Research Within the Company*, American Management Association, (New York, 1924), p. 10.

times the normal February in the volume of deliveries. During 1923 (the year in which the plan was started) the *volume of deliveries in October was only twice that of February.*

AMERICAN CAST IRON PIPE CO.

Birmingham, Ala.

"You might be interested in knowing that we have been rather active in attempting to stabilize our business by promoting winter buying. Until the last two or three years, (1923, 1924, 1925) the cast iron pipe business has been extremely seasonal, it being the custom to stock pipe in the winter time for spring and summer delivery. This was a very hazardous policy due to the fact that a fluctuation in the price of pig iron would often cause a tremendous loss in inventory value. Through publicity we have interested our customers in buying pipe in the winter time, as much as possible for winter delivery, and have made price concession to those who were willing to follow this policy. In addition to the price concession, we have been able to show many customers other material advantages in buying their cast iron pipe during the dull season.

"The net result has been very valuable, not only to this company but to the industry as a whole."

THE PATTERSON-SARGENT CO.

Paints, Varnishes and Lacquers

LONG ISLAND CITY, N. Y., *Aug.* 6, 1930.

"We do not find it necessary to give price reductions to our dealers in order to secure their orders in anticipation of Spring requirements.

"We do, however, give them a special dating. In other words, if they place their order with us in October, the bill is automatically dated March 1st or April 1st, subject to salesman's agreement, and as our regular terms are sixty days net the bill in question would not be due until May 1st or June 1st as the case might be.

"We also extend to our dealers the privilege of anticipating the payment of these bills by granting them an additional 1% if paid thirty days prior to special dating or 2% if paid sixty days prior to special dating.

"We feel sure that with this information you will be able to understand the manner in which we endeavor to overcome certain periods of the year which would otherwise be dull."

Market Policies of a Successful Clothing Firm Which Regularized Production and Employment to a Very Appreciable Degree

THE HICKEY-FREEMAN CO.

"Up until the time the Hickey-Freeman Company inaugurated a pre-season overcoat trip it was generally believed throughout the industry that a lay off in the overcoat shop was absolutely unavoidable between seasons. In manufacturing a product of the highest quality you can readily appreciate that a lay off of this kind in our overcoat shops was not only a costly matter, but also, seriously jeopardized the quality which we achieved in our product. As a result, we gave the problem considerable study, and our woolen buyers made arrangements with the woolen mills to purchase overcoat cloth considerably in advance of the usual season at slightly reduced prices. This enabled the mills manufacturing the cloth to give their employees steadier employment because they were able to manufacture these overcoatings during their usually slack periods, and consequently were willing to give us a reduced price for placing our orders in advance.

"We in turn passed this saving on to the retailer—providing he placed a part of his overcoat requirements with us in advance of the usual selling season. The Hickey-Freeman Company was the first men's clothing manufacturer to undertake such a radical step in selling overcoats. Our sales force go out into their territories during the month of February and book orders during that month on winter overcoats for delivery in September. This enables us to keep our overcoat shops busy the year around and consequently insures the quality of workmanship which is put into our garments. This means, of course, steady employment for our overcoat shops, and also steady employment for our cutters. You might be interested to know that up until the past two months our cutting department has worked 100% full time for the past four years. This is a partial result of our pre-season selling of overcoats.

"The patterns presented to our customers on this early trip are more or less of a staple character, and represent the coats which the retailer can intelligently purchase in advance of his regular buying period. We include some fancy patterns, but the bulk of our business on this pre-season trip is booked on the staple and semi-staple fabrics. This means a saving of from $2.00 to $3.50 per coat for the retailer providing he places his order with us during the month of February.

"It was necessary to take a very definite stand on this matter because there is a tendency on the part of the larger retailers to demand the early prices even though they do not place their orders with us until the regular selling season. The first season we made this early trip we established a very definite policy in this regard, and the prices on these overcoats are definitely advanced after the month of February, and all orders placed after that date are booked at the regular prices.

"There are, of course, other ways in which we have endeavored to minimize the seasonableness of our business. About two years ago we introduced a semi-staple fabric and recommended to our customers to carry a stock of garments made in this fabric in their store of irregular sizes. This would enable the retailer to have in his stock at all times garments which would fit 95% of the people who came into his store. We recommended that as soon as one of these garments was sold the retailer should immediately re-order a garment to take its place, and thus maintain a standard stock of garments in this fabric. Many of our customers adopted this plan with outstanding success, and the result from a production point of view is that there is a continual flow of these re-orders coming into our plant.

"The Hickey-Freeman Company has developed many feature trade-marked fabrics in both topcoats and suitings. Since these fabrics are in general demand and in the case of topcoats can be sold either in the Fall or Spring, our dealers, as a rule, maintain a standard stock of these feature fabrics and fill in as the garments are sold. This enables us to carry profitably in our own stock garments made from these feature fabrics. They are never sold at reduced prices and consequently we are able to cut in for stock on these feature fabrics during the low points of our production schedule. In addition to these feature fabrics, we stock, of course, blue suits, tuxedos and other staple items.

"The writer believes that the above represents the principal methods we have adopted to overcome seasonable slumps in production and employment. If you would like any further information in regard to the above the writer shall be very pleased to go into further detail on any of it.

"It might be interesting to know that according to the figures that are available the labor turnover in our plant is the smallest of any of the larger clothing manufacturers in the country, and also, that our workers have steadier employment than in any of the larger clothing plants, which accounts in some measure for the very small labor trouble. Since we are able to give our workers year around employment we are able to secure the best workers in the market, and once they do secure a position with us they guard it very jealously."

2, *A Planned Program for Sales and Production which Provides for an Approximately Even Rate of Production Through the Year.*

The foundation of a number of successful programs of stabilized production and employment is the budget. It focuses attention

on the costs of seasonal production, the costs of overhead regardless of production, of training new workers and of lowered efficiency when there is little work ahead. It indicates methods of anticipating sales to control inventories, of correlating the operations of the various departments in a business, of providing for foreseeable contingencies and of checking results against expectations. The following examples illustrate planned programs of sales and production which have resulted in more even employment throughout the year.

Program of Stabilized Production and Employment

KODAK PARK WORKS, EASTMAN KODAK COMPANY

Rochester, N. Y.[1]

The problem of providing steady year-round employment in spite of seasonal sales has received considerable attention at the Kodak Parks Works of the Eastman Kodak Company for many years. The general scheme which was developed calls for a constant level of production throughout the year by accumulating finished stocks in the slack season. This plan has been very generally adopted throughout the entire plant with only minor modifications to fit particular conditions.

The Kodak Park plant is the largest manufacturing plant of the Eastman Kodak Company. Its products are sensitized photographic goods of all kinds, including Kodak film, motion picture film, both positive and negative, flat sheet film for professional photographers, X-ray film, photographic papers of all kinds, photographic plates, and chemicals. These products are not only finished at Kodak Park but in general the preliminary manufacturing operations are also done there, such as the manufacture of the film base and the production of basic photographic paper. There are at the present time more than 8,000 employees at this plant.

That the program of stabilization has been effective is indicated by the fact that for the year 1929 the maximum number of employees on the payroll at any month was nine-tenths of one per cent above the average number for the year and the minimum number at any month was eight-tenths of one per cent under the average. This calculation was made with an allowance for normal year to year growth.

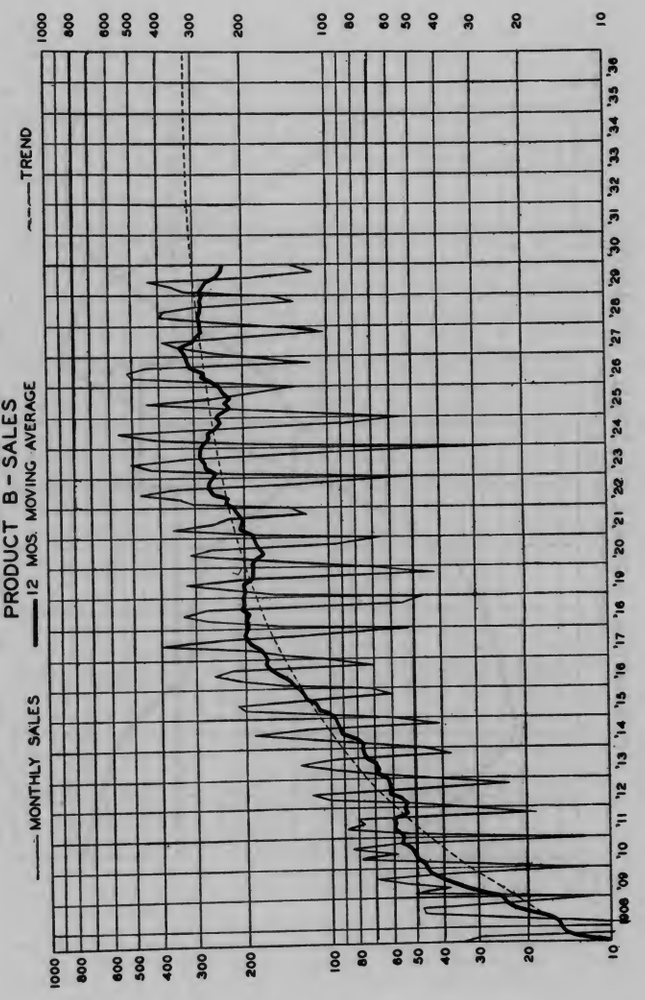
The adoption of such a production program involves four major steps which are briefly outlined as follows:

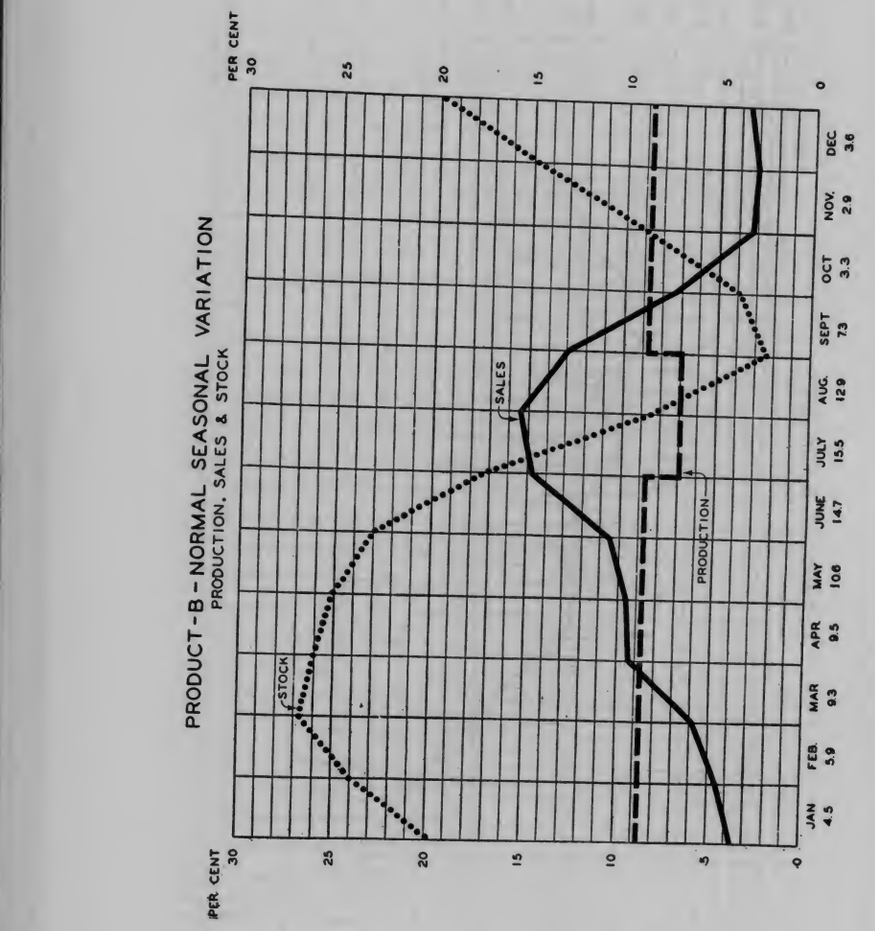
1. Sales Forecast

A forecast of sales, which is as accurate as possible, is absolutely essential in any program of production control. Such a sales forecast is made in collaboration with the Sales Department and by the use of statistical methods. Such estimates must take into account the longtime trend of sales, current business conditions, and any special advertising or sales programs. Too much emphasis cannot be laid upon the necessity of careful sales forecasting. A forecast should cover a period of one year if possible in order to properly allow for seasonal variations.

Chart No. 1 shows a typical growth curve of a product which is highly seasonal and which is markedly influenced by the swings of the general business cycle. The curve shows the monthly sales—the line which is fluctuating widely—and a heavy black line running through these fluctuations which represents the average sales for the past twelve months and which consequently eliminates the seasonal influences. A computed trend line is also shown which may be considered as the line of normal growth. From the study of this chart, a forecast covering a one year period can be made which will be modified to take into account current business conditions and any sales promotion plans. This is largely a statistical problem and it is highly important that it be done as carefully as possible.

[1] Prepared by A. H. Robinson, statistician for the Eastman Kodak Company.





2. Seasonal Measurements

The second step is to break down the annual forecast into monthly sales. In order to do this, it is necessary to measure the seasonal tendency of the sales month by month over a period of the past few years. Again this is a statistical problem but a convenient method is to express the average sales for each month as a percentage of the sales for the entire year. The sum of the percentages for all months will then equal 100 per cent. This we call a normal seasonal variation and is shown on Chart No. 2 as the heavy solid line. Interpretation of this curve is that the January sales are 4.5 per cent of the total yearly sales; in July the peak sales are 15.5 per cent and the lowest month, November, is 2.9 per cent of the total year's business. Applying these percentages against the yearly sales estimate gives us a monthly estimate of sales.

3. Production Schedules

The third step is to establish the most convenient and economical production level throughout the year. Not only from the point of view of stabilizing employment but from the standpoint of investment in plant equipment, we have found it more practical to produce at a constant rate throughout the year and accumulate finished stocks in the season of reduced sales. This program is especially important where expensive equipment and highly trained operators make it uneconomical to build the plant capacity to meet the peak sales.

There is always a vacation demand during the summer months, which comes at the time of peak sales, and this demand has been met by reducing the production rate by 20% during July and August. This production curve is shown on Chart No. 2 as a broken line. This means that instead of producing 8.33 per cent of the year's requirements each month, we manufacture 8.62 per cent for each of the ten months, September thru June, and 6.9 per cent for each of the months July and August. These figures, of course, should be adjusted for the number of working days. Such a vacation program involves the carrying of somewhat higher stocks of finished goods during the late spring than where the production level is constant throughout the year but the difference is not great. It also involves an extremely careful analysis of requirements for individual units, sizes and parts in order to have a balanced stock at the beginning of the period of peak requirements and low production.

4. Stock Levels

The determination of the amount of finished stock to carry at all times ot the year is the fourth step. It is readily seen that the minimum stock will come at the point when the sales rate drops below the production rate, for then stocks begin to accumulate. The minimum then can be taken for a starting point for the calculations and can be set at any quantity, usually the absolute minimum that can be carried at this time and yet fill orders. The stocks for each of the other months may be determined by a process of adding production and subtracting sales for each of the months in order, beginning with the minimum point. The dotted line shown on Chart No. 2 illustrates this accumulation of stocks and is what we call "normal" stock, which in this particular case reaches a maximum of 26.6 per cent at the end of February and is approximately a three months' stock at this point.

It is convenient to express the normal stock in terms of percentages which, while the figure will not add up to 100%, makes it possible to determine the normal amount of stock at any time of the year by simply applying this percentage to the yearly sales estimate. This is particularly useful when revisions of forecasts are made.

We know now just how much stock to plan on at all times of the year. If storage facilities are limited or there are other limitations financially or otherwise, the production schedule may be altered and the level of production determined so that the amount of stock is reduced. Such a program, however, would necessitate a changing production level.

The four steps which have been outlined above give a very brief description of the plan of production control in the manufacture of finished goods. It is described in a somewhat theoretical manner and must be adapted to each particular product. There is a great deal of flexibility in such a program. It

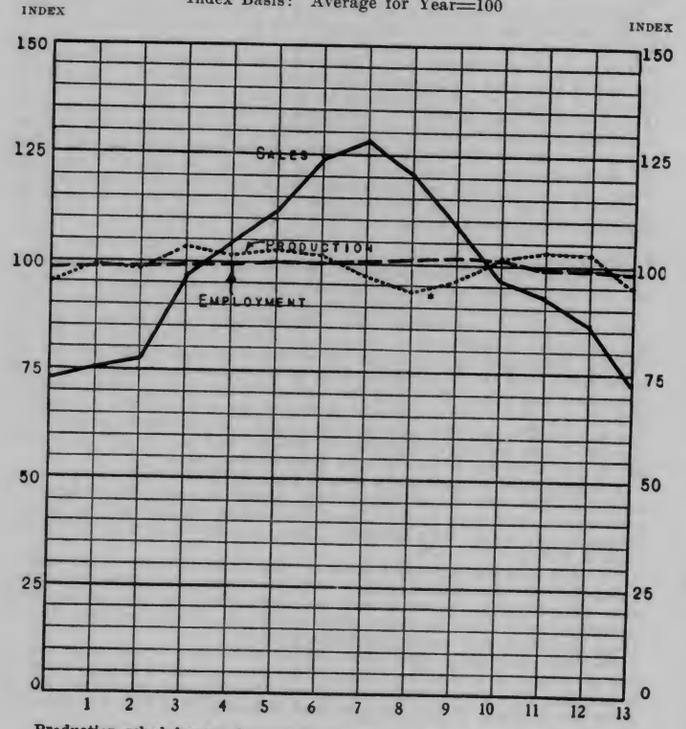
may be used in planning production of an individual product or it may be used as a scheme for controlling the production of an entire department where the unit considered may be "man" hours or some other convenient unit. It is frequently necessary to accumulate more than normal stocks of a few large running products where there are small orders for special products coming through continuously and which cannot be stocked. In this case, the normal stock at the peak will consist of only those products which may be called the "bread and butter" line.

With the seasonal variation substantially eliminated from production of the finished product, it is a relatively simple matter to schedule the supply of parts and the preliminary production processes throughout the plant. We have found it most practical to establish maximum and minimum stock limits within which the stock may fluctuate at will, maintaining all the while a constant rate of production. This is to get away from the prevalent practice of manufacturing for a definite fixed stock which results invariably in a production schedule which fluctuates as widely as do the sales. In general, all manufacturing processes are keyed to an average annual rate of sales and the fluctuations in the stocks of parts will absorb the inevitable minor fluctuations in production.

EASTMAN KODAK CO.—KODAK PARK WORKS

SEASONAL INDEXES OF PRODUCTION, SALES AND EMPLOYMENT

Index Basis: Average for Year=100



Production schedules are dropped during summer to take care of vacations.

The Methods Followed By Bausch and Lomb Optical Co.[1]

Sales are constantly being analyzed throughout the year in both units and dollars in various ways, such as, sales by country, state, city, customer, branch, district, unit distribution, etc. We classify our entire unusual variety of products into twenty-one divisions which are segregated completely throughout the entire business.

Our chief business is lenses: we produce and maintain standard stocks consisting of over 40,000 varieties. We also manufacture eye-glass frames. It might be mentioned that one frame can be made into 1,000,000 combinations consisting of bridge size, height and width, eye size, color of gold, weight of gold, temple length, etc. All sales and production budgets for these lines are controlled by actual units. Then we have a machinery and equipment line and instrument line, consisting of varieties such as binoculars, range finders, periscopes, microscopes and many others. One complete microscope has 14,000 cost finding operations. We employ approximately 3,000 people. We are the only optical glass manufacturers in America and also have our own foundry.

We have our sales broken down daily into 21 divisions. We use the number of business days in the month for our control. We know, for instance, when we are at the 10th business day out of 25 for the month. If you have performed so much business in the first ten days against the budget, you then have a balance of so much, which results in your average daily requirements for the remaining fifteen days. Each product division has a copy of this report and in such form that the man in charge of a division, who may have a budget of $150,000 and who may have sold $60,000, knows that he has $90,000 to go in so many days. With the use of such an average sales control, we have been able to tell the company as early as the 8th or 9th of the month to an almost uncanny degree of accuracy what the total actual volume will be for the particular month. Our sales are very seasonal. We have some product lines where we obtain 5 per cent of the year's total for March and again for April and then swing to 15 per cent for September and 16 per cent in October. Therefore, when we budget our sales, we not only have to budget the total annual volume but particularly forecast volume by trend for each month. Once a man said, "Why don't you divide the first quarter by three and make it, for instance, $100,000 a month?" He might have sold that much in the first month of the quarter involved but on a trend perhaps he should have sold $130,000 for that particular month. In such a manner he would not have realized his failing until the end of the quarter. You must get down to a monthly trend basis in order to meet your volume goals.

The production unit budget is then determined from the sales budget, consideration being given to the balance order situation and then tempered by stock conditions. That is, due to the above conditions, the sales budget might be 1,000 units while the production budget might possibly be 800 or 1,200 units.

With such a coordinated sales and production unit budget, we are able to determine the complete direct labor and material requirements throughout the year and to allocate such throughout our 89 operating departments. It might be mentioned that in laying out our plans for these direct expenditures to meet our production, we consider the inventory conditions of all our classes of product on an inventory turnover basis. We then actually budget our inventory increase or decrease from month to month and on an accumulated basis to the end of the year. It might be added that we also plan for a net inventory increase or decrease at the end of the year, whichever should be necessary. Where the product classes are seasonal we budget an inventory increase for the lean months which by computation will be absorbed in the peak months. In such a manner we have been able to stabilize our labor throughout the entire plant and consequently throughout the entire year on a normal basis. Such stabilized planning has been a great contribution, by having the good will of our labor, consequent reduced labor turnover, increased skill and quality, reduced costs and the reduction of tool and machine repair expense.

[1]Adopted from an article by E. S. La Rose, Assistant Comptroller. Production Series Bulletin 89 of the American Management Association.

The labor was steady throughout the entire year except for the shutdown between Christmas and the New Year. Standard materials are acquired from month to month and castings are acquired in the early part of the year and again in the fall. With the actual budgeting of inventory increase or decrease, from month to month, you may readily tell management when the inventory peak will occur, which in our case is in July, and how much total inventory must be handled, taking into account cash and other considerations. It might be mentioned that our total direct payroll, since the first of this year, has not varied over several hundred dollars per week, which surely indicates stabilization through the budget.

Three years ago, when we started the budget in our company, one of the first things we did was to determine the amount of volume or use of capacity necessary for the company to break even. Today, there are many managers who have little or no idea of the volume necessary for their plant to break even. It happened that the capacity of our plant was doubled during the war and naturally was handicapped and suffered when the normal post-ward period arrived. Therefore, the development of capacity, quotas, controls, and the budget became vitally essential to the business.

MR. W. E. UMSTATTD (The Timken Roller Bearing Co.): Has your force of employees for the past several years been fairly constant? I judge you must have maintained a rather even force.

MR. LA ROSE: We budget on an annual basis and might possibly, at the end of any annual period, step up or down. In the olden days, our labor fluctuated severely but during the past two years it has been practically on a straight line. As I previously mentioned, it has given us less labor turnover; the consequent goodwill of labor, has caused better skill and quality and saved considerable tool repairs. Our direct labor budget, of over several million dollars for the year of 1929, was within $774 of actual performance.

MR. T. W. EUSTIS (Frigidaire Corp.): I happen to be in a General Motors subsidiary but I will not take up the cudgels on the Ford question. Many lines of business are seasonal, have bulky storage requirements with large sums of money involved, and are not able to carry out uniform production schedules. When you are operating on a practically uniform production is it not possible, even though your employees are skilled, that there would be further economy if you struck a compromise by balancing the inventory carrying charges against the cost of fluctuating production? By following your ratios and making your special adjustments you can develop similar budgets for seasonal production schedules. Have you made a study of that kind?

MR. LA ROSE: Working with machined parts that involve micrometer measurements is one stunt, but when you realize the skill required for making prisms square within a light ray, you may then possibly realize the reason for keeping skilled labor employed. Our entire direct labor is of an unusual skilled type. We have measured the money involved and the return and have found that stabilization of labor through fluctuating inventories, was very profitable. There are many well-known successful cases of stabilization, where labor was not skilled.

Stabilization Policies of the Packard Motor Car Co.[1]

As is well known the automobile industry is one of the most irregular. From July until the following February or March the curve of production in the automobile factories declines, and with it the volume of employment. Some years ago, the Packard Motor Car Co. determined that it would try to stabilize its production. It, therefore, determined that it would produce in advance of orders by dealers and thus keep busy during the months when the other Detroit factories were laying off men and working part-time. This necessitated the five following steps.

(1) Accurately estimating a year in advance what the total production of cars for that year was going to be. Mr. M. A. Cudlip, the Vice-President of the company who has been active in the stabilization program, describes the factors which they take into consideration in fixing their yearly quotas.[2] "In

[1] Prepared by Paul H. Douglas, Technical adviser to the Commission and Acting Director, Swarthmore Study on Unemployment.
[2] M. A. Cudlip's *The Level Production*, p. 1.

estimating we use every statistical device that lends itself to our needs. Our past experience, our plans for the future, the probable competitive desirability of our product, all of these factors and many more are carefully analyzed and weighed before our production program is determined. We consider probable economic conditions and business forecasts which are as reliable as human data can be. However, the successful management under level production operation does not plan extravagant expectations, yet has equal opportunity to expand operations if its yearly program has been too conservative."

The method followed was in brief, to take past sales, find the rate of growth in previous years, and then determine, in view of general market conditions, the situation in the automobile industries and changes in the Packard Car itself and the program of the company, whether this rate of growth could be expected to continue. If it could, then a yearly quota was set. If it couldn't, then the allowances for these factors were estimated and a quota set. In the preparation of this quota, past experience was tinged with conservative optimism, but the company permitted itself no such orgy of hope as led the manager of another automobile company to believe that his already large concern could double its sales in one year. As Mr. Cudlip suggests, the yearly schedule was fixed at a point where it might be possible to increase production as sales outran the estimates, instead of at a point where the only re-adjustment which could be effected would be a decrease.

(2) Once the yearly standard had been set, monthly production quotas were fixed by dividing the total by twelve. Thus, if 36,000 cars were the yearly standard, then the plan would call for a monthly production of 3,000.

(3) An attempt was made to get the Packard dealers to take cars in advance of the time when they were usually ordered. Because of the fact that a Packard agency is generally a lucrative one which dealers wish to hold, and because a large amount of goodwill has been built up between the company and its distributors, a considerable number of cars produced in the otherwise slack months were thus shipped to the dealers who helped in this way to absorb the slack.

(4) The aid of the dealers, however, not being sufficient to absorb the production of cars during the months from July to October extra warehousing space was erected in Detroit and leased outside of New York and one other large city. The cars produced in excess of current sales were stored there in anticipation of the Spring rush to purchase.

(5) Along with the estimated sales and production budget for the year, the probable sales by months were estimated on the basis of past experience. If 3 per cent of the average yearly production of cars during the preceding few years had been sold in January, then that figure would tend to be set as the probable percentage for that month in the quota of the coming year. On an estimated yearly basis of 36,000 this would be 1,080. This percentage was of course modified according to new developments which were expected to occur during the year.

The actual sales record was then closely compared from month to month with the budgetary estimates. If the former continued to fall appreciably below the latter, then the production budget was reviewed and generally revised downward. This would mean of course a reduction in the size of the force. If, on the other hand, it developed that the estimates had been too conservative and that sales were appreciably exceeding the productions, then production was increased to meet the new estimate which was made for the year. In other words, the budget was kept flexible and adapted to actual situations. To the degree to which it was well-done originally, however, these modifications would be slight.

(6) If it developed that over the year as a whole production had been allowed to exceed sales, then an opportunity was afforded the public to become Packard owners at reduced prices. The cost of this reduction was borne entirely by the company and the dealers' commissions were untouched. This, naturally, made the dealers enthusiastic for the general policy since the lower price stimulated total sales and hence raised their income. They consequently became even more willing to cooperate in the general program of stabilization by ordering more cars in advance.

While this reduction in price cut into the maximum potential profits of the company, it was not so much of a loss as might seem at first sight. For the overhead costs of the company would have gone on had these excess cars not been produced. An appreciable expense would have thus been incurred in any event. These cars were, moreover sold between seasons when they did not damage the demand for the past season's car and when they probably did not reduce the volume of demand for the coming season's car. Finally the sales reduction served to introduce the car to a wider circle of owners who would become educated to its use and who would be more likely to purchase Packards in the future at their regular price.

(7) Such a program of planned production and the storage of the excess could only have taken place in a car whose model was relatively standardized from year to year and upon which only minor changes were made. This has always been one of the outstanding characteristics of the Packard Car. It was this which originally enabled it to launch forth upon its program of regularization, secure in the knowledge that the stored cars would not be outmoded. The program of regularized production has in turn reinforced the policy of a relatively standardized model. For if you are providing cars in advance of demand and have a large amount of capital tied up in inventory, it will be difficult for ardent sales-managers to persuade the chief executives that new models should be designed to attract particular portions of the trade.

This stabilization program of the Packard Company was on the whole extraordinarily effective during the years preceding the depression of late 1929 and 1930. The following table showing the ratio of the numbers employed during the months of the year to the average for the year during 1922 (which was before this plan went into effect) and during 1928 after it had been tried out, shows this increased regularization.

Ratio of Those Employed in Packard Motor Car Co. to Average for the Year[1]

	1922	1928
January	60	94
February	65	96
March	77	97
July	133	93
October	103	112
November	98	109
December	97	....

It will be seen from this that while in 1922 the numbers employed in the peak month of the year (July) were two and a fifth of those employed in January, that in 1928 the peak month of October had only 19 per cent more workers[2] than January. The amplitude of fluctuation had been reduced to less than one-sixth of what it was six years before. The level of employment during the whole first quarter of 1922 was in fact but one-half that of the peak month while in 1928 it was 86 per cent of this peak.

Part of the fluctuation in 1922 was due to the fact that it was in that year that the recovery from the previous depression took place. But even in 1925 during the peak month there were 45 per cent more workers employed than during January and about 40 per cent more than during the first quarter of the year. This was an amplitude over twice as great as that of 1928.

PROCTOR AND GAMBLE [3]

Another interesting example of stabilization is that of Procter and Gamble, the largest soap concern in the country. Prior to 1920, its sales and production of soap fluctuated greatly from one season of the year to another. In

[1] Compiled from statistics given in Unemployment in the United States. Hearings 70th Congress, 2nd Session, pursuant U. S. Res. 219, p. 71.

[3] Prepared by Paul H. Douglas. Technical adviser to Commission and Acting Director, Swarthmore Unemployment Study.

1919 for example, the maximum force employed in its Cincinnati plant was 3,195 as constrasted with a minimum force of 1,935. The maximum staff was, therefore, 65 per cent greater than the minimum, and approximately the same degree of fluctuation prevailed in the other factories of the company. This high degree of contraction and expansion was not caused by corresponding irregularities in the rate at which consumers bought and used soap. Soap, as a necessity, is used at an approximately constant rate through the year, although there is something of an increase in the summer over the rate of use during the winter. The oscillations were caused by the fact that Procter and Gamble marketed its product through jobbers and these bought spasmodically. The company after studying the situation decided that the purchasing policies of the jobbers[1] "were based largely upon market conditions. The raw materials entering into our products are very well-known, and the price of the finished product is governed largely by the raw material market. When a price advance in raw material was apparent to the jobbers, heavy purchasing naturally followed. Frequently, these orders covered their needs for months to come. Our factories operated at capacity, enrollment increased and our people were required to work overtime. After a period of full production, orders began to fall off, and the jobbers' stocks were more than adequate to meet their normal sales' needs. Our production then continued until our depleted stocks were again replenished, then curtailment of output and reduction in enrollment of necessity followed." The Company's production and employment was, in other words, being made a football by the speculative practices of the jobbers who were trying to lay in large stores of soap and other products when prices were low so that they (the jobbers) could advance them to the retailers when prices were to rise.

In order to stabilize production, William C. Procter, the President of the Company, decided that it was necessary to discontinue marketing their products through the jobbers and to sell directly to the retailers. Because of the comparative steadiness in the purchases of the ultimate consumers, he believed that this would lead to a more even flow of orders. In order to make this transition, however, many business changes had to be made. An increased selling force was needed which had to be trained in new methods and in new types of approach which were adapted to the retail trade. Since the jobbers formerly stored the soap pending its distribution to the retailers, Procter and Gamble now had to erect and lease large warehouses in different parts of the country. The cost of these and other changes which were necessitated by the new program has been estimated by L. J. Zoeller, the personnel manager of the Company to have been well over 2 million dollars.[2]

Once this system of distribution had been perfected, the next step was to prepare an estimated sales budget for the following year, which is described by the company in the following terms:

"The first step necessary was to estimate the sales for the coming year. Approximate figures were supplied by the sales supervisors, each of whom is in charge of a group of ten to fifteen salesmen, covering a territory representing roughly two hundred thousand of population. These estimates were tabulated by the various district sales managers, and forwarded to the general sales department at Cincinnati, where they were reviewed, revised when necessary, and definite quotas prepared for each division of the sales department. The sales department agreed to stand by their estimate and to dispose of the products in a steady flow throughout the year. The sales figures were then translated into a production schedule by the manufacturing department, covering the year's activities in the various plants.

"Supplementing the quota laid down at the beginning of each year by the sales department, very close contact is maintained between the manufacturing and the buying and sales Divisions, and on the twentieth of each month a revised production schedule is worked out, determining the various brands and sizes that will be required during the following month. (The previous

[1] This is a memorandum of the company's, printed in Dr. Herbert Feis' excellent analysis of the labor policies of Procter and Gamble—*Labor Relations*, pp. 98, 99.

[2] Beulah Amidon, Ivorydale, A Payroll That Floats. *The Survey Graphic*, April 1923, p. 19

estimates were only of totals, not of brands and sizes.) You will understand that the purpose of these meetings is only to correct minor discrepancies in the production and distribution schedule. As a whole, production based upon the yearly estimate is maintained, even when it becomes necessary for some of the finished products to enter the warehouses for a time, or when the sales exceed the production for the month * * * in only one year did the actual sales, and estimate, fail to tally within a reasonable figure. In this particular year, the sales exceeded the estimate."

The new plan was begun in 1921 and after two years of experimentation with it, the Company felt in November, 1923, that it could thereafter guarantee at least 48 weeks of employment a year to all workers who had been employed for over six months and who had joined the stock-purchase profit-sharing plan. The Company had maintained a profit-sharing plan for over forty years which had gradually been changed from an outright distribution of cash to payments made to workmen who had bought stock of the Company. These payments were credited to the worker's equity in the stock until he had acquired its ownership and thereafter were made in cash. The guaranteed employment plan was confined to this group and did not include those workers who had been with the firm for less than six months, nor to those, who having been employed for more than this period had nevertheless not bought stock. The first of these groups has amounted on the whole to approximately 25 per cent of the force, although their number has relatively diminished with time, while the second comprises about 10 per cent of the workers.

On the whole, the Company has been strikingly successful in diminishing the fluctuations from year to year as is indicated by the following table:

PROGRESS IN REGULARIZATION IN THE IVORYDALE PLANT OF PROCTER AND GAMBLE 1919-29

Year	*Maximum Number Employed*	*Minimum Number Employed*	*Difference Between Maximum and Minimum*	*Percentage Maximum is of Minimum*
1919	3,195	1,935	1,260	165
1920	2,846	1,832	1,034	157
1921	2,000	1,459	641	144
1922	1,951	1,516	435	129
1923	2,025	1,731	294	117
1924	2,003	1,740	265	115
1925	2,371	2,252	119	105
1926	2,749	2,341	408	118
1929	2,652	2,484	168	107

Instead of the maximum force being 65 per cent greater than the minimum as was the case in 1919, this difference had been diminished by 1929 to one of only 7 per cent. It will also be seen that the stabilization had been virtually attained by 1923 when the formal guarantee was put into effect. The whole experiment demonstrates that it is generally idle to make a guarantee unless the production and sales policies either have already been developed so as to make the guarantee economically possible or so that it can speedily be put into effect. It is, however, also true that once the guarantee has been put into effect, a force is set up which tends to prevent management from abandoning the policy. Happily, in the case of Procter and Gamble there is no desire to change this policy of stabilization but on the contrary there is a firm belief in it, as something which is essential to the welfare of the company as well as to its workers. Colonel Procter

himself has spoken of the benefit which the plan has given to the company as follows:[1]

> "Since the plan has been adopted our turnover after six months service in the company has been reduced three-fourths. The men are happier, better contented and more pleased with the guaranteed plan of employment than any other feature that the company has adopted for their benefit, and I might mention that the company has the profit-sharing, sick benefit, life insurance, accident insurance, and disability and old-age pension. The company has profited largely under the plan; it is difficult to estimate how much in dollars and cents, but the reduced cost of production secured through regularity of work with the same steady employee is very great. I think I am conservative in stating that it has reduced our cost of production from 3 to 5 per cent."

ONEIDA COMMUNITY, LIMITED

(Manufacturers of Silverware)

Oneida, N. Y.

(The use of a Product in Budget and a Flexible Working Week.)

"At the beginning of each year we estimate our sales in detail, as to territories, patterns, pieces, etc., being guided by all sources of information such as past history, territorial conditions, competition, etc. These estimates are checked constantly with orders as the year progresses and are revised as conditions indicate.

"Our normal sales have a considerable peak in the fall. Probably 65% of the year's sales are in the last five months of the year, rising to the greatest peak the last three months. This peak character of our trade would not permit steady year round operation without some smoothing out of shipments, so we go to the dealers in midsummer with a dating offer for a certain amount of business for early shipment, payable in January. In this way we take perhaps 10% of the year's business away from October, November and December in favor of August and September.

"Having smoothed out sales to this extent and in spite of the fact that the first half of the year is light, we try to operate at a nearly steady production speed throughout the year. The speed, however, is set so conservatively that in a normal year we expect to run overtime in the fall as much as the men can stand without becoming over-tired. Our leeway with a permanent group of employees lies between what we can produce with this overtime in the fall and what we will produce if forced to run on short time in case sales fail to reach our estimates.

"The nature of our product is such that bulk storage is not a very serious problem. On the other hand, greater fluctuation in the rate of production than can be accomplished with trained employees is decidedly inefficient and endangers quality. It takes some time to train our skilled employees. Steady production is for us the most efficient operation in spite of storage problems and in spite of the fact that we must finance accumulating production throughout the year until fall.

The dating referred to above does not avoid a financial peak because we do not receive that money until January. The extra cost of interest on investment and the extra cost of overtime pay are less than the penalties involved if we do not run to that degree of steadiness which keeps within the producing limits of a steady group of skilled employees.

"Naturally this program of steady production for efficiency is also best from the human side and we are fortunate in that respect. It is impossible to say what we would do if faced with such storage and other problems as some businesses have to deal with, involving fluctuating employment. We can imagine the problem of automobile or coal production, both having storage difficulties of the first magnitude.

[1] These figures are taken from Feis, op. cit., p. 108 and Miss Amidon's article in the *Survey Graphic*, April, 1930, p. 18.

[2] *Unemployment in the United States*, 70th Congress, 2nd Session Hearings on S. Res. 219, p. 134.

"It is impossible for us to avoid fluctuation in employment, however, during periods of marked depression like the present. While our normal schedule is 45 hours a week, we have been running on 40 hours all of this year with no prospect of overtime this fall, and have also been obliged to carefully look over our personnel and let go a few who were not up to standard."

An Illustration of Stabilization Through the Production of Parts During the Off-Season

DWIGHT DIVINE & SONS, INC.—ULSTER KNIFE CO.
Ellenville, New York

August 6, 1930.

"Under reasonably normal conditions, our sales vary through the year, and in our section labor is in short supply in summer, which is the usual season of minimum demand for our product.

"Equalizing employment through the year by increasing stocks of component parts, when raw materials are at a favorable purchase basis, and increasing assembling and finishing capacity during the fall and winter on shipping specifications, is economically essential.

"But under present uncertain prospect of future demand, styles. values and pegged material costs, operating close to demand on a restricted basis, even at a loss, is sounder policy than absorbing capital, particularly on borrowed funds.

"It is generally recognized that inflated wage scales in certain trades are out of line, and due for readjustments, which can only be brought about by reduced employment in such lines, through curtailed demand by reason of high costs of products or service, until costs have come more in line with general levels."

An Example of the Production of Standard Lines During the Off-Seasons

G. LEVOR & CO., INC.
Gloversville, N. Y.

August 5, 1930.

"The staple product that we produce during our slack months is, of courise, leather, but just what kind of leather consistent with our line of production that one can call staple, differs from time to time. There is, however, at any time, some staple in the line that we can afford to make and produce considerably ahead of demand, and it is to that determined item that we address our attention during the slack months."

An Example of Budgeted Production Plus a Differentiative Price Policy and the Development of Side-Lines

ITHACA GUN COMPANY
Ithaca, New York

August 1, 1930

"As a background for my answers to your two questions, I would state that the Ithaca Gun Company is a close corporation, the stock being evenly held in the families of two partners who founded the business fifty years ago. For this reason the executives are not responsible to stockholders who have no interest in or connection with the business other than the receipt of dividends. For this reason there is an element of pride and sentiment on the part of the executives which extends to the employees. Some of the employees have been in the employ of this Company all their lives.

"(1) Answering your first question, the main principles in making up our budget for the coming year consists of a careful analysis of our business for the preceding year which forms the basis of our budget. A revision of

this analysis is made during the month of April based on the experience of the first three months of the current year and the production during the year is continued accordingly. Our fiscal year is the calendar year, although during the month of December we have practically no sales. During that month a careful examination of the orders received during the entire year is made. Business conditions in the trade are considered and an estimate made under all conditions as to needs for the ensuing year. A schedule of production is made accordingly and production is continued on that basis. If it appears during the winter that it is necessary to modify production, such modification, if possible, is deferred until after the first of April as it is a policy of this Company not to discharge employees during the winter months if such practice can be avoided. Orders from large concerns are received during the first three months of the year for later shipment. Such orders comprise about two-thirds of the Company's business. On the basis of such orders it is possible to estimate within certain limits the requirements for the year and to modify the budget by increasing or decreasing the earlier estimate as to the needs.

"This is the more possible because we are engaged in the manufacture of a standard article, which is well known and in manufacture and sale of which we have an experience covering about fifty years.

"(2) In answer to your second question, I would say not only are sales to customers not precisely even during the year but that the business of manufacturing shot guns is one of the most seasonable there is.

"The sport of trap shooting which is fairly uniform during the year creates a small portion of the demand. By far the larger part of the demand for these goods comes during the hunting season which covers no more than three months throughout the United States. Those months being September, October and November. The demand for shipment does not begin before about the first of August. This means that we must accumulate stock during the first six or seven months of the year for shipment during the next four or five months. The article we manufacture does not require great space for storage as compared with an automobile or a refrigerator but the problem of storage is somewhat embarrassing. There is also the question of financing. It is necessary to carry our business without income for about six months of each year. In order to get relief from both of these problems and also in order to obtain orders for future shipments as early as possible for the purpose of forecasting the year's business, we offer certain advantages in our terms of business to customers who will place their order early in the year. In other words as it is a distinct advantage to us to receive orders during the first three months of the year, even though the goods are not to be shipped until later, we pass some of the advantages on to our customers. As a result of this policy, we have an even production during the year and under normal conditions accumulate large stocks during the off season which are drawn down during the busy season. During the last two years, however, we have had an unexpected falling off in the industry which has resulted in too large an inventory. In order to relieve this condition and in order to keep our men employed we made arrangements the first of the year for the production of an entirely new line of goods, reaching a different market. In this way we have been able to keep more of our men employed than would otherwise be possible and our employment has also been steadier. Just at the present time we are running five days a week. In this connection it is interesting to note that from our observation the men prefer a working week of five days rather than five and one half."

Budgeted Production of Shoe Polish

GRIFFIN MANUFACTURING COMPANY INC.
New York

August 13, 1930

"Our budget for manufacturing steadily during each of the twelve months of the year is furnished from the experiences of the previous year and, partially, from our judgment of the trend for the coming year.

"We market twenty-one different items, many of which are produced in different colors and/or sizes. So far as factory production is concerned, the change in size and color constitute another item. Therefore, we must bottle, seal, label, etc., approximately one hundred and fifty items.

"Our sales records show, by months, the amount of each color and size of each item we have sold throughout the year. We use this record to determine the specific items and amount which must be produced for surplus or at an even rate throughout the year.

"All items do not sell in equal proportion to each other. Sales of some items follow consistently the sales fluctuations of the business. Other items, while forming a large volume of our sales, sell entirely in a period of three to six months. We select the items for production in our slow seasons which do not make up a large volume of our business. We also produce for storage, some items whose sales are large during short periods. In this manner, we do not require extensive storage space for surplus finished inventories and we reduce the amount invested in such inventories."

Budgeted Production in an Industry With Complicated Style Problems

DANIEL GREEN FELT SHOE COMPANY

Dolgeville, N. Y.

August 14, 1930

"As soon as a new line is decided upon, which is usually done in the fall of the year, a careful analysis is made of the entire line and consideration is given to the possible effect any new styles might have on the sales of related styles.

"Our line consists of about 300 distinct styles. Each one of these is made up in several widths and colors so that the line really covers several thousand items of which between 900 and 1,000 are carried in stock.

"A card is made out for each style by color and width, one side of which is a Production record and the reverse being a record of weekly sales for the past four years, the accumulated sales, sales by sizes for the past five years, and sales by salesmen.

"About the middle of January a forecast of sales and production for the year and of the inventory we are willing to carry over at the end of the year is made of each style in the line and this information is carried to a set of sheets designated as Production, Sales, and Inventory Control.

"On the first sheet of this control set-up we show the actual production of the past year week by week, actual production for the present year in the same manner, forecast production and gain or loss as compared with forecast production, both by pairs and percentage.

"Next to our production we show last year's actual sales, present sales, and forecast sales—also showing the gain or loss in pairs and per cent as compared to forecast.

"Next to these sales we list last year's inventory, Present inventory, and forecast inventory with gain or loss figures as well.

"All of this information is shown weekly as well as accumulative so that we can tell at a glance what progress we have made week by week or for the year to a given date.

"In this manner, we are working for a predetermined inventory and are able to keep our production in balance with our sales, which in turn keeps the inventory at a safe figure.

"This first sheet shows production, sales, and inventory of all types of shoes, but as our line is made up of six distinct types of footwear or so-called classes, we have found it necessary to repeat this information for each individual class on separate sheets. Therefore, we at present have a control set-up consisting of seven sheets, one of which is a summary of the other six. This summary is produced weekly at our factory executive meeting and is displayed to the superintendents of our factories and the Sales and Production executives.

"Naturally, in manufacturing on the basis described we accumulate a surplus of goods during the first six months of the year to be used in filling orders received at a later date. This plan would, of course, work a hardship on a manufacturer of small means as it would entail the borrowing of funds and, of course, additional costs for storage but we believe that the latter can be more than offset by manufacturing economies gained by steady production.

"It certainly results in minimizing labor turnover, which of course is very expensive. We have no idea of the saving we make on this item but we do know that we could not produce quality slippers if our turnover was great as it takes considerable time to educate an operator to our standard of quality.

"We can state, however, that our business has been operated profitably for a great many years, while many of our competitors have fallen by the wayside and a large majority of them have not been financially successful.

"In answer to your last paragraph, we wish to say that at one time our product was to a degree standardized but now has become very competitive and very sensitive to style trend. It is also to a certain extent seasonable, but some styles which we make are stable the year around.

"The production control record enables us to instantly sense a falling off in sales of a given style of slipper and to cut down our manufacturing of the style accordingly. The result is that we have very small amount of unstandard slippers at any time which have to be disposed of at a sacrifice."

Production to Stocks of a Standardized Product

EXCELSIOR QUILTING CO.

Long Island City, N. Y.

April 21, 1930

"Our business is separated into two distinct divisions, one, our White Goods is steady all the year round, although the fall months show a large increase in demand. To offset this we have installed additional equipment and during the period of lesser activity continue to run and *make up a stock* for distribution during the rush period. By doing this it is possible to employ practically the same number of operators and give them steady work the year round. Our other division, Black Goods and quilting for the Kimona Trades, is purely seasonal. From July through December we are running full time, and during the other half of the year we are almost completely shut down. Up to the present time there has been no way developed to avoid this as this particular business is dependent on style changes that make it impossible for our customers to anticipate their requirements. For some time past we have been endeavoring to develop other lines of work for this machinery, but up to date this has not worked out in any particular volume."

Budgeted Production in the Textile Industry

THE COLUMBIA MILLS

New York

"(1) In planning our production for our operating periods which are respectively, the first and second six months of each year, we take our sales for the same period in the previous year as a basis. We then either increase or reduce the quantity for the manufacture according to our estimate of what business will be during the period in question. After we have decided upon the quantity to be manufactured, we divide it by six and produce a uniform quantity each month during the period.

"(2) Our business is not uniform throughout the year, but in following the above method, we accumulate sufficient stock during the dull months to take care of the increased demands during the good months when sales exceed production. We have sufficient storage space so that the accumulated inventory is not burdensome. There are comparatively few style changes in

our product so that we do not face the problem which causes manufacturers in other lines a great deal of trouble when they attempt to forecast a coming Season. Our method results of course in savings and labor turnover but it results in increased investment in inventory but this investment is always under control, and over a period of time will no doubt show a savings also.

"Incidentally, we have not yet been able to put our saving into dollars, but we do know that we have stabilized employment and that production planning is worthwhile."

Production of More Standardized Products During the Off-Season

DUTCHESS MANUFACTURING CO.
Poughkeepsie, N. Y.

May 1, 1930.

"We endeavor to stabilize our manufacturing by making staple garments during the slack season of the fancy garments. We have in our business two seasons, Spring and Fall. At the beginning of each season we manufacture staple garments for stock, and then, as the orders come, we manufacture the fancy garments and in this way run more uniformly than we could otherwise. Especially during the past year has this made it possible for us to give fairly steady employment to our employees."

Budgeted Production by a Textile Mill

(Name held on request as confidential)

"(1) The principles we follow in the portion of our budget relating to production are first, the computation of seasonal variation in our different classes of sales; second, the forecasting of expected sales for the year in each class; third, the production of goods for these sales, so far as possible on an even basis throughout the year; and fourth, comparison of actual sales with expected sales as a check on the accuracy of our sales forecast.

"This is possible in only part of our business, where the product is uniform and can be stocked. Other parts of our business are concerned with goods necessarily made on special order, and cannot be as well controlled in this way.

"(2) This policy does require building up a stock during part of the year, and we unfortunately cannot give you any definite figures on the financial advantage. We have indications, however, that the cost of starting up new production to take care of peaks, and the cutting down of production in the low period are more expensive than interest, insurance, storage, and other charges in connection with the building up of stock, to say nothing of the advantage we secure through our ability to get a larger annual production from our machinery than if our production followed sales."

3. *Examples of Developing Side-Lines and "Fillers" for the Off Seasons.*

SOME FACTORS DETERMINING THE CHOICE OF SIDE-LINES AND FILLERS [1]

If one examines the various cases in which developments of side-lines and fillers have been successful and in which they have not, it is possible to lay down certain obvious but nevertheless important considerations governing the type of product which can be built up as a filler.

In general it can be said that the new product should not be too dissimilar from the existing main product so that it can be

[1] Prepared by Paul H. Douglas, Technical Adviser to the Commission and Acting Director, Swarthmore Study on Unemployment.

turned out with the same machinery, fabricated by the same workers, and marketed by the same selling organization. Thus when the S. L. Allen Company of Philadelphia, which manufactures agricultural implements, took on children's sleds to fill its pre-January trough, it could use virtually the same machinery for them as for the main products. Similarly, a New York firm which manufactures milk and ice cream cans for the summer trade turns its attention with comparative ease to the manufacture of coal scuttles for the winter. In the case of the A. C. Gilbert Company which has just been cited, the fact that an electric motor had already been in connection with the main set of products made it possible to use this as the central feature in the new set of fillers which were developed.

It should also be realized that it is necessary that the side-line should be one which can be made by the working force without too great difficulty. In the cases which have been cited, the skill of the workers could be carried over to the new products with virtually no loss. This is also virtually the case with the Welsh Grape Juice Company, the Columbia Conserve Company and the Beech-nut Packing Company, and indeed of virtually every instance where the experiment has been successful.

This adaptability of the working force should, however, be reckoned in terms of cost as well as of skill. It is a mistake in general to put highly paid workers at commodities which are produced elsewhere under a low wage scale. Thus the Columbia Conserve Company originally tried canning pork and beans as a means of filling its valleys but gave this up after a time because, though the force turned out a good product, this article was produced in other canneries with unskilled and low paid labor. It became very difficult for the Columbia Company's pork and beans to stand its ground in the market, and the company then turned to higher priced products such as chop suey, chicken a la King, etc., where the high skill of the force could work to advantage and win its way in the competition of the market. Similarly, the failure of a number of clothing firms to keep on with some of the garments which they manufactured during the slack seasons was because operatives skilled on higher priced garments could not economically be transferred to cheaper garments where careful tailoring and workmanship were not required.

This should not be interpreted to mean that fillers should never be taken which cannot sell for a profit. As we shall see, the economies in the utilization of the overhead and the maintenance of a steady force of workers may be such that it would be better to produce these goods at a loss than not to produce them at all and to suffer a still greater loss. The point simply is that in seeking for an ideal "filler" one should try to develop a product which is adapted to the wage-scale and skill of the employees.

Finally, the product should be one which can be handled by the same sales force. This was one of the great advantages of the various side-lines which were taken on by the Winchester Arms

Company. Its salesmen of firearms were already calling on hardware merchants and could sell to the same group with little added bother, cutlery, flashlights, tools, skates, etc. Similarly, the same stores which bought agricultural implements from the S. L. Allen Company, could also buy sleds.

Had it been necessary for these companies to develop a new sales force or train the existing force to approach an entirely new set of customers, the added expense would in most cases have been so heavy as to have been impracticable. The side-lines which were taken on had the great merit of absorbing some of the sales-overhead which had already been built up.

Such considerations as these serve rather drastically to limit the field within which supplementary products may be chosen for development. Business men should look rather closely at home for such possibilities and not try exotic ventures.

A further caution should, moreover, be added. If side-lines and fillers are chosen carefully, they should not be abandoned hastily. It will necessarily take time to build up confidence in the new product even though it be marketed to old customers. Managers will frequently be tempted to discard it and to try something else. But since such a product would also have to go through a period of trial it is better to stand by the original idea until it has been given an adequate trial. In addition if a company changes frequently, all of its products will suffer somewhat from the disrepute which such a fluctuating policy will inevitably cast upon them.

There is one further observation which should perhaps be noted. The process of "rationalization" within a large company with a number of plants frequently operates to make the dove-tailing of side-lines more difficult. For such a program generally involves devoting each plant to a rather specialized use so that while the company may produce a wide variety of products, each plant will itself concentrate upon only one or at best upon a few. This is one of the advantages of specialization which a large company can obtain and has been practiced for example by the General Electric Company.

But the process of rationalization should not be carried too far and the various plants should each be given a group of products which so far as possible will dovetail in to each other and permit steady employment through the year.

The following are examples of side-lines and fillers which have been developed by a number of firms to steady productive operations.

THE WELCH GRAPE JUICE COMPANY

Westfield, New York

"Several years ago, when grape juice and a grape spread were our only products, uniform production throughout the year was practically impossible.

"After pressing grapes, in the Fall, there was invariably a period of inactivity for about two months, then, heavy production until about July 1st and another layoff until we pressed grapes again.

"In the meantime, *we have added a jelly line to our products*—grape, currant, crab-apple, quince and mint—and a grape fountain syrup (Welchade). These products, with the prevailing method of dealers in buying in small quantities, as needed, rather than stocking up for the season, as in the old days, have helped us to largely overcome spasmodic production.

"There is still a period, after the grape season, when we are faced with conditions that compel us to lay off our help for a time, but we are planning to partially overcome this through efforts to stock points where there is an early demand for our products."

THE RACQUETTE RIVER PAPER COMPANY

Potsdam, N. Y.

"Briefly, we have concentrated in our Research Department on the production of new types of specialty papers, for which, in certain instances, we have created the market and have thus succeeded in such wide diversification that, where the *staple* brands were overproduced in the country, we still could secure sufficiently wide distribution to keep our mill in operation."

Stabilization Through the Development of Side-Lines

BENEDICT MANUFACTURING CO.

East Syracuse, New York

August 5, 1930

"We have your letter of August 4th and we have been fortunate in being able to even out the peaks and valleys of sales in our business by getting out products that have an appeal at different seasons of the year.

"The Fall and Winter is the big season for sales to jewelers. We have found that a very great part of our business was being shipped in these months so we designed a line for soda fountain, restaurant and hotel use which has its big sale in the Winter and Spring.

"Then too, we also carry quite a considerable finished stock. We turn our finished stock inventory approximately four times a year. We have sufficient resources to finance this without borrowing any money and we find that it pays dividends in satisfied labor. Our labor turnover is very small indeed, nearly all of our labor being skilled."

A Transfer of Labor is Necessary if Work is to be Dove-Tailed

MICHAELS, STERN & CO.

Rochester, New York

"In regard to yours of April 16th, we endeavor to do all major repair work, cleaning, etc., during our slack seasons to give our employees as nearly as possible, a full week's work. During the general slack season in our industry, some of our departments are operating full time, while others are working slack time. We have worked out a program by which employees are transferred from one department to another, thus giving the average employee more hours of work than would be possible without this arrangement. This method has also reduced our labor turnover to a minimum.

"In departments such as Piece Goods, Sponging, Shipping, Cutting, Trimming and Stock Keeping, we have a definite system of interchanging employees from one department to another as work requires it. For example, when our Stock Rooms and Shipping are busy, our Sponging and Piece Goods are on slack time. We have picked out different employees and trained them so they can now be shifted from one department to another as the case requires it. This has enabled us to give our employees more hours of work per season, than it has in the past when there was no interchanging of men between departments, and has naturally reduced our turnover of labor in such departments."

Dovetailed Production in a Drug and Medicine Company

THE NEW YORK QUININE AND CHEMICAL WORKS

New York City

"We alternate during the year in manufacturing our various products; that is, when we increase the output of certain products, we decrease the output of others and vice versa.

"The effect of this method is that we have not had to reduce our working force considerably at any time."

THE BEECH-NUT PACKING COMPANY[1]

It is traditional in the canning industry to hire as many people as are necessary during the canning seasons and then let them go when the season is over. The usual excuse for this is that most of the help need not be "skilled" in the usual sense. But the Beech-Nut Packing Company felt that it needed skilled workers, in the sense of steadiness, dependability, and training in the purposes and ideals of the company, to secure a high standard of quality.

We have always striven, therefore, to give our employees steady work the year round. This required some manipulation of production, and the introduction of products which could be manufactured in betweeen the seasons of the more temporary activities. This manipulation brought benefits other than a stable labor force; it kept the plant and equipment busy, which, in turn, greatly reduced our overhead expenses.

The biggest adjustment in seasonal production was necessary in our plant at Rochester, which makes a variety of conserves and condiments. This plant is in the fruit belt of New York State. The fruit is brought directly by the farmers from the fields to the factory door. Most of it is used the same day it arrives. It is cooked, canned, labeled, packed, and often loaded into freight cars within 24 to 36 hours of the time when the fruit left the wagons. During the busy season the factory frequently works 16 hours a day, employing some extra hands.

The seasons for the various fruits follow one another closely so that the plant is ordinarily kept busy in this sort of work for only 5 months out of each year. So we looked for a product or products which could be packed during the remainder of the year. Pork and beans proved to be just the product we needed.

The same problem of filling in seasons was present at our Canajoharie plant. Here it was less acute, but more complex because of the larger number of products made.

Some of these are year-round products, some are not. Jellies, jams, preserves, and so forth are seasonal products and must be packed in the summer or fall. Peanuts, on the other hand, may be obtained throughout the year, as they are grown in the South. Consequently, we use peanut butter as a balance for conserves, and make it throughout the year except during the conserve season. At that time peanut butter workers are transferred to the conserve department. The schedules of the two kinds of products are fitted together so as to keep the operators steadily busy. Previous to the conserve season a stock of peanut butter has been built up which will last at least through the interruptions.

As a result of these and other precautions our plant has amalgamated the ups and downs of several distinct packing seasons into a steady flow of product with the exception of a period of a little over three weeks in the latter part of December and the early part of January. A slight drop in sales takes place then on account of the fact that salesmen take their vacations at that time.

During even this period we do not arbitrarily lay off employees. On the contrary, we use them in giving each department a thorough cleaning. This annual cleanup, needless to say, does not take the place of the daily cleaning. Like good housekeepers, we believe the daily cleaning needs to be supplemented by a thorough annual house cleaning. Moreover, it gives us an opportunity

[1] Taken from an article in *Factory*, March, 1923, by John Gore, of Production Department, pp. 276, 277, 278, 306.

for an annual check up just as a stockroom undergoes an annual inventory. Then, too, when the production workers themselves do this job, they give each other better cooperation in the routine maintenance of cleanliness during the year.

Another problem, cllosely tied up with seasonal variation, is maintaining a balanced supply of raw materials. The fact that perishable products are being packed makes purchasing difficult, for many of our products cannot be carried in stock in very large quantities.

We might perhaps carry a larger stock than we do, but we want our products to reach the consumer in the best possible condition, and, as a first step in this direction, we always keep our stock of perishable products down to the minimum. To have always enough stock on hand and yet not too much, requires considerable foresight and judgment in making our purchases,

We have tried several ways to keep our purchases more in step with seasonal demand. Let me cite a particular case.

Take our bacon department, for instance. Bacon has to go through certain long curing and smoking processes, so that the total time of manufacture is about six weeks. This cannot be increased or decreased, yet the sale of bacon is somewhat seasonal. We desire to have our bacon reach the market within as short a time as possible after its manufacture so that the consumer will get the benefit of its flavor and quality, as this is a big factor in sales and incoming orders, and our reputation is based on it. On the other hand, we do not want to turn down any orders.

Consequently what we have to do is to adjust our production to suit this seasonal fluctuation. We must prepare for this adjustment at least seven weeks in advance, due to the length of time that the bacon has to be in process before it can be packed.

As a help in controlling such purchases, we plotted various curves of sales for a number of past years. We use these curves as a help in estimating the trend of future sales of the current year. One set of curves which we find very helpful is a set of "three-weekly" curves. The three-weekly curve is used in preference to a weekly curve as it is smoother and has less fluctuations.

We plot in black the three-weekly curves of the last three years and on the same sheet in red the three-weekly curve of the current year. This shows how the sales of the current year compare with the past three years and is a help in estimating future sales. Each group of products is charted in a similar manner.

Another set of curves which we find valuable is a set of cumulative curves. The cumulative production, shipments, and estimated production are plotted on the same sheet with last year's cumulative shipments. The estimated production shows us what we have bought ahead and what we have coming through process. By extending the shipment curve, allowing for a decrease or increase as previously estimated, we can see whether or not we have sufficient bacon coming through process. All curves are brought up to date each week and the necessary adjustments in purchases are made at that time.

The rise or fall in prices has more or less effect on our purchases as it has in every business. Our main policy in buying, however, insures just enough of a supply to fill our orders without building up too large a stock of finished product. This is the policy which is adhered to even if high or low prices conflict with it. But frequently it does not conflict with minor opportunities for buying a little more or a little less than the standard supply. These savings in purchases, however, are minor in comparison to the economy that comes from steady operation and to increased sales that come from a high quality maintained by carrying low stocks of goods.

Nevertheless, these minor savings are important. For example we find that a chart of seasonal fluctuations in hog prices for the past 10 years gives us the basic key to the fluctuations of the products we buy. This chart, constantly compared with the current year's chart, helps us to estimate the future trend of prices and enables us to make occasionally minor adjustments on the side of economy.

Losses can be quickly remedied, if they are discovered promptly. Ideal cost records point to bad conditions almost as instantaneously as a volt meter needle fluctuates with load. We realize the value of daily flexible

cost records. Costs are reported back to the foremen of the various departments within two days of the day to which the costs refer. Foremen have a chance to correct the conditions which caused peaks in cost. At times corrections can be applied to the end of the very same lot of material upon which the costs are gathered in spite of the fact that our business involves the use of only a few days' run of materials in each job.

These cost records pay for themselves within a day or two. No one asks "What is the good of costs?" for no one has to wait until the end of the month or even later to get the cost reports which he no longer has the opportunity to apply. These costs are not ancient history.

Quick turnover of the expense of cost records seems as desirable as quick turnover of any other investment. We get quick turnover on all of our costs.

On these reports we show (1) to what extent the production schedule was fulfilled, (2) the efficiencies of the important machines, (3) the percentages of scrap and waste produced, and (4) the unit cost of each principal group of operations.

HENRY A. DIX SONS COMPANY[1]

(Womens Clothing)

In December, 1923, the Henry A. Dix and Sons Company with three factories in New Jersey, after twenty-seven years of successful operation was sold and transferred to the employees of the business. This transaction received wide publicity. A feature which was, however, not so widely acclaimed was the fact that Mr. Dix and his son, while conducting a business in the highly seasonal ladies' garment trade had been giving their workers stable employment. This stabilization not only facilitated the transfer but presents to other employers an example easier and more worthy of imitation than the transfer itself. The Dix Company started as manufacturers of women's summer dresses, a product subject to extreme fluctuations both of season and style. The first step was to keep a successful business from overexpanding. When an annual turnover of a million dollars had been reached, Mr. Dix determined to consolidate and to go no further. The second step was one which is taken by all employers who are determined to stabilize: the policy of making what you sell was changed to selling what you make. In order to insure a steady market, the Dix Company developed sober but pleasing designs and careful quality. With a reputation and demand for its products well established, the Dix Company was able to manufacture for stock in the slack season, confident that their models would find a market. However, a third step was found necessary to assure complete stability, namely, combining a staple with a seasonal product. A few additional machines were installed in all three factories which made it possible to manufacture nurses uniforms when the stock of cotton porch and house dresses threatened to grow too large. During the past year the directors of the Dix Company have been able to continue these policies as well as to increase the volume of business 10%.

FLOERSHEIMER & SALKIN[2]

Floersheimer & Salkin, manufacturers of women's dresses recognizing the importance of continuous production in their business and for their workers, got rid of their summer slump by the device of manufacturing in quantity certain favorite styles for summer sales at a price which omitted the usual addition for commissions to salesmen and other expenses. By this device and by other elements of good management a member was able to report.

Our precautions to fill in between seasons have enabled us gradually to raise the percentage of employees whom we retain all summer. That percentage, 20 per cent, 40 per cent, 50 per cent, in former years, has now mounted to between 80 per cent and 90 per cent. We intend that it shall go higher.

[1] Taken from Lewisohn Draper, Commons, Lescohier—"Can Business Prevent Unemployment," pp. 21–23.

[2] Taken from Feldman, "Regularization of Employment," p. 142.

A. C. GILBERT COMPANY[1]

Toys and Electric Motors

In 1914, after five years of making toys from which returns came chiefly during the months of October and November, A. C. Gilbert marketed an electric fan, the first ever to sell at the low price of $5. His thought was that production of this item, along with the probable addition of others of similar nature, would enable his company to balance fall toy sales with spring and summer sales in the electric field.

What happened may be summed up in the statement that whereas the first advertising to back this Polar Cub electric fan amounted to $5,000, in 1928 its extensive Polar Cub brand of electric products was selling every month of the year and had a $100,000 advertising program behind it. The initial fan effort to feed a low-priced market has led to the opening of a vast household market for moderate-priced, trade-marked electric appliances, the manufacture of which has enabled our company to place its entire toy and appliance production on an even keel and to maintain sales the year round instead of chiefly during two fall months.

The move that straightened out production and sales curves was a natural evolution. During the five years in which Mr. Gilbert had been developing his toy products, the outstanding one of which was Erector building sets for boys, he had made a toy electric motor. Producing more and more of these motors, he looked around for new uses to which to put them, and it occurred to him that there was being marketed no low-priced electric fan.

He believed there would be a wide field not only for a cheaper fan but also for other less costly products which could be put to household use. If such a market actually were waiting to be cultivated, he felt the cultivating of it would do several things for the Gilbert company. First of all, it would be able to continue making the motor, with which it had had experience. There would be no need to invent a new item and build up new production facilities. Second, it would allow a steady production flow throughout the year. Third, and as important as any, there would be a consistent cash turnover instead of an income heavy at one period and light at most others. Fourth, our salesmen could be kept busy on a much more even schedule and at considerably less cost than was possible under existing toy-selling conditions alone.

Accordingly, Mr. Gilbert's idea was tried out that first year with a single appliance, a six-inch fan priced at $5. Merchandising proved to be very severe pioneer work, for the reason that distributors would not touch the new product, declaring that the market was not large enough to make it worth their while to handle such a low-priced item.

As a result of this negative distribution experience, the company went the following year direct to the retail trade. It gained considerable distribution. In 1916 it went a step farther, adding a second motor-driven household appliance—a mixer for drinks, mayonnaise, icings and so forth—and in that same year it started to advertise. At this time it used outdoor advertising mostly. The initial appropriation for the Polar Cub line that year was $5,000.

Distributors then began to notice the goods, hardware wholesalers being the first to take on the two items. Since then many hardware distributors have developed separate electric divisions to merchandise similar goods. Later, electrical jobbers, realizing that there was a good market for low-priced electric appliances after all, also took on the trade-marked goods, with the result that today practically all of the appliance business is handled by jobbers, with the exception of demonstrations, which continue to be handled direct. This year a $100,000 national advertising campaign finds business for the company all over the United States, and even chain drug stores such as Liggett's sell practically the entire line at full prices.

With the spreading of distribution and the assurance that the field was as productive as Mr. Gilbert originally believed, a family of appliances whose chief characteristic is that they save household labor, have been added. to the original fan. The mixer was followed with a vibrator, a hair dryer and then a heater. After that came a ventilator for kitchen, bathroom or laundry.

Today, following this plan of slow and tested growth, the Polar Cub family

[1] Taken from "Printers' Ink," Nov. 1, 1928, pp. 17–20.

has a juice extractor and an electric whisk broom, with other additions going through manufacturing and merchandising trials at the present moment. On top of this, the original six-inch fan at $5 has been reduced in price to $3.50 and eight, nine and ten-inch sizes added, the largest costing only $9.95 retail. All are a logical outgrowth of a directed effort to supply to a large market advertised electrical appliances of daily use at low initial cost with subsequent economy of operation and with continued saving of home labor.

To sum up, the gradual development of the family of electric appliances has done exactly what Mr. Gilbert expected it to do, solving the problem which many other manufacturers in other fields have long been up against—how to get regular turnover of production, sales and finances for a seasonal line. For Polar Cub products have built up a secondary market which tends to become more and more stable and extensive. And this secondary market has given a means to produce steadily the electric motor, common to all the company's products, while building up reserves for the Christmas toy season, and at lowered unit cost.

The Polar Cub line also has kept the toy salesmen efficiently productive at all seasons, thus reducing overhead on toy products. In addition, capital, instead of remaining frozen ten months of the year, has been allowed to turn over rapidly and therefore to work more actively for the toys.

Altogether, by bringing about financial, production and sales benefits, the development of the secondary Polar Cub line has enabled the company to expand more freely, constructively and economically in the primary field of toys—which always has been and still is its major market.

WINCHESTER ARMS COMPANY[1]

(Ammunition and Hardware)

An exceptionally interesting instance that shows the value of diversification of lines when coupled with excellence of management is the Winchester Arms Company, New Haven, Conn. In this case the end of the World War is said to have found the company with a plant four times as large as that in 1914 and capable of making five times as many rifles as the annual purchase of the whole world before the war. The choice was either to scrap the additional equipment or to put it to use in manufacturing new products. There was also the choice between going back to a personnel of about 7,000, to which peace had reduced the plant, or remaining at around 22,500, as at the close of the war.

Although started in the Civil War period, the Winchester Arms Company had confined itself to rifles, small arms, and ammunition. It was not until under the leadership of J. E. Otterson, now president, that confidential investigations were begun in 1918 as to new market possibilities, and these investigations were followed up by intensive analyses of particular fields, in which the research departments of some important advertising agencies aided. After careful preparations complete plans for diversification of product were launched.

The first group added was a complete line of steel cutlery, including pocket knives, scissors and shears, razors, carving sets, kitchen cutlery, butcher's cutlery, camp cutlery, etc. To enable the firm to start production, two small factories were purchased. The two new factories located elsewhere had been needed for their equipment, not for their space. They were therefore sold. The desire to use the New Haven factories to capacity thus proved an unusually favorable circumstance in making diversification of output provided a basis for the use of an existing labor force. The company has made a detailed study of all the good points of existing products. Particularly it has directed its attention to the consumer's experience to determine what improvements to make. That its research was thorough is attested by the firm's success against its chief competitors in the new line.

With the same thoroughness, the availability of other products had been investigated. Soon flashlights and batteries were added, after many improvements were instituted in them. Roller skates and ice skates became the next

[1] Taken from Feldman, "The Regularization of Employment," pp 134–136; 196.

new products. Then the manufacture of fishing tackle was undertaken, and part of the war plant now houses perhaps the largest fishing tackle factories in the country. Attention had also been directed to improvements and innovations in tools, and a complete line of carpenter's equipment further assisted in cutting down idle space in the plant. Athletic goods were then also made part of the line, but only a few items are manufactured, the rest being bought. The number of products already made allow for complete elimination of seasonal slack.

This diversification of products was accompanied by distribution engineering and sales operation of high order. The effect of the Winchester distribution technique, as well as other elements in the situation, provided very severe competition in the trade. The largest rival, manufacturing what until recently, at least, was considered to be the best line of cutlery and tools in the United States, was the Simmons Hardware Company, makers of the "Keen Kutter" brand. This old and well-known firm was merged with the Winchester Company, The diversification of output of the latter was thus greatly extended because the many plants in the Simmons group included harness and saddle factories, two paint factories, automobile-engine factories, and facilities for other products. The adoption of new lines came just before the depression of 1920 and 1921, and, therefore, the fullest benefits were not at once attained. The policy, has, however, shown itself highly profitable.

The Winchester Company has adopted a plan in organizing local hardware dealers. The store which becomes the authorized Winchester agent in its locality agrees merely to give the products of the company preference. Also, the agent purchases in the open market, not from the firm, at least three $100 shares of 7 per cent preferred stock. There were about 5,600 agents in December, 1923 with, 2,000 more on the map prospects. Service to these dealers is extensive. Constant educational activity keeps up the morale. The company has organized its local dealers into Winchester clubs, usually on state lines, and has even held several national conventions for them. These clubs have been vital factors in the building up of an unusual cooperative spirit. Among the activities carried on are special sales campaigns to eliminate the dealer's usual summer slack, and other helpful efforts.

4. *The Flexibility of Working Hours*[1]

If, for one reason or another, it is not possible completely to regularize production by the methods discussed, some firms have adopted a fourth method, namely to vary the hours of work in such a way that an approximately constant number of workers will be maintained, who will work more than the standard hours per week during the busy season and less than the standard during the off-season.

The Delaware and Hudson Railway is perhaps the most prominent exponent of this plan. That railroad works an elastic day which generally ranges from 8 to 10 hours. The understanding is that no one shall be laid off for lack of work until less than 48 hours per week is provided, and that no men will be hired until 60 hours of work is exceeded. In practice, the company has generally abstained from laying off men when the hours fell below 48 if the workers preferred to share the slack time, and on the other hand has seldom taken advantage of its opportunity to hire more men on those few occasions when the working hours have exceeded 60 per week. Over the period of time during which this policy of

[1] Prepared by Paul H. Douglas. Technical Adviser to the Commission and Acting Director, Swarthmore Study on Unemployment.

the elastic working day has been tried out, the hours of work for the men in the locomotive and rolling stock department have, for example, varied between 54 and 32. This policy combined with that of laying more rails during the winter-time has materially reduced the fluctuations in the numbers employed as is shown by the following table.

DIMINUTION OF FLUCTUATION IN EMPLOYMENT ON THE DELAWARE AND HUDSON RAILWAY—1920–1928

A. Maintenance of Way and Structures

Year	*Maximum Number*	*Minimum Number*	*Differences Between Maximum and Minimum*	*Percentage Maximum is of Minimum*
1920	4,200	2,750	1,450	153
1922	4,200	2,400	1,800	175
1924	3,400	2,625	775	130
1926	3,200	2,750	450	116
1928	2,725	2,475	250	110

B. *Maintenance of Motive Power*

1920	3,310	3,265	45	101
1922	3,112	2,346	766	133
1924	3,021	2,670	351	113
1926	2,587	2,500	87	103
1928	2,315	2,052	263	113

C. *Maintenance of Other Rolling Stock*

1920	2,540	2,121	419	120
1922	2,535	1,278	1,257	198
1924	2,070	1,796	274	115
1926	1,799	1,788	11	101
1928	1,614	1,480	134	109

It will be seen, therefore, that the greatest progress has been made in the case of the maintenance of way crews where the fluctuation in the force has been reduced from one of 53 per cent in 1920 and 75 per cent in 1922 to only 16 per cent in 1926 and 10 per cent in 1928. Greater regularization has also been effected for the shop crews who repair other than locomotives. While the fluctuation in these forces was only 20 per cent in 1920, it was no less than 98 per cent in 1922. This was cut to 15 per cent in 1924, to 1 per cent or virtually complete constancy in 1926, and to 9 per cent in 1928.

Greater stability has always characterized the repair work on locomotives. In 1922 the maximum was one-third higher than the minimum, and this was diminished in the succeeding years to a difference of 13 per cent in 1924, 3 per cent in 1926 and 13 per cent in 1928.

The Columbia Conserve Company also has a flexible working week. Although its average hours are approximately 45 per week, at the height of the packing season the staff will frequently work

from 60 to 70 hours a week. Since the permanent workers are on a guaranteed annual salary, they receive no extra pay for their work. During the slack season, however, they will work somewhat less than the normal week so that the total number of hours per year is not disproportionate.

Other firms which practice this custom of the flexible working week are the National Cloak and Suit Company of New York, the Wilmer Atkinson Company of Philadelphia, and Leeds and Northrup.

On the whole the practice has a great deal to recommend it. It is surely better that a constant number of men should work a varying number of hours than that a varying number of men should work a constant number of hours. There are, however, several safeguards which should be attached to any such plan: (1) If overtime is worked during the busy seasons, then during the dull period, the actual time worked should be correspondingly less than the standard. The method should not be used, in other words, to increase the total amount of time worked during the year. If the working week were only expanded upward, the advantages of stabilization would naturally be afforded to fewer workers. (2) The total number of hours worked during the busy season should not be so excessive as to fatigue the workers in such a manner that they could not fully recover during the periods of diminished employment. This means that it is much better for a plant with a moderate working week of 44 or 48 hours to adopt such a program than for one where the working week is approximately 60 hours.

THE PLAN OF THE JOHN A. MANNING CO.[1]

(Flexible work plus the development of new products, unemployment insurance and the dismissal wage)

Employment Stabilization Methods

JOHN A. MANNING PAPER COMPANY

I. Reasons for having a plan.

For a number of years we have been interested in the problem of stabilization of employment, having at one time gone to the extent of guaranteeing fifty-two weeks' employment for each man in our employ for more than one year. This guarantee was eliminated after a one year trial because of misunderstandings arising from its application. Our reasons for being interested in this subject are as follows:

(a) We believe that men work more efficiently when relieved of the fear of working themselves out of a job.

(b) Stabilization eliminates the waste involved in breaking in new men.

(c) Stabilization protects the purchasing power.

(d) Unemployment is a problem which Society must solve, and we believe it is better solved by business men than by passing it over to the government for solution.

II. General Methods of Solution.

Every effort is made to sell our products into industries having a minimum seasonal fluctuation. We also attempt to secure forecasts of

[1] Prepared by Mr. Adams of the John A. Manning Co.

consumption from our customers and to get whatever guidance is possible from standard indices. Manufacturing for stock is only practical on a very small scale, as a paper mill can turn out enough products in a few days to fill all of its available warehouse space.

III. Special Methods of Solution.

(a) The speed of paper machines is flexible within certain limits. When orders are not quite sufficient to maintain the normal speed to which all of the processes in the mill are adapted, it is practical to reduce the speed, as this procedure is usually preferable to a complete shut-down. It maintains the skill of the operatives, keeps the mill routine unbroken and enables a more intimate study of the manufacturing operations, which is useful from a research standpoint. To offset the cost of reduced speed, the machines are run for short periods when orders warrant at higher than normal speeds—at a rate which the men could not sustain for a prolonged period, but which their enthusiastic cooperation makes practical for a short period.

(b) During slow periods we carry on experiments in the development of new lines. We find it very difficult to make satisfactory experiments when the mill is pushed to get out regular orders; therefore, our new lines are very largely developed during slack periods.

(c) In a paper mill it is necessary periodically to overhaul machinery, as little opportunity is afforded during normal times, owing to the process running twenty-four hours a day. It is also impractical to do much painting while the machinery is operating or even to install new machinery. Manufacturing must be carried out in complete freedom from dust, paint, or any other foreign material. We use our entire working force for such overhauling and make an effort to postpone the work until dull times.

(d) After exhausting the above expedients we resort to a shorter work week such as a five-day week, our normal week being 5 2/3 days. This distributes the time equally over the entire working force. In dull times we do not make a practice of laying off a certain percentage of the force as this would not result in an equitable distribution of working time and has other difficulties inherent in it as a means of solution.

(e) Our vacation with pay plan can be used to the advantage of the men by scheduling the vacations to take place in the dull period wherever possible.

(f) In the By-Laws of our Welfare Association there is an unemployment insurance clause which reads as follows:

"Unemployment insurance shall be borne entirely by the Companies in the form of a guarantee to pay to each member who may be unemployed because of inability on the part of the Companies to furnish employment of some kind, a sum not exceeding $72.00 in any one calendar year, this insurance to be paid in such amounts as will insure the member a minimum income of $9.00 per week."

This has very rarely been resorted to and is therefore only in the nature of a final safeguard.

IV. Displacement of Men by Machines.

(a) It is generally possible to predict within a week or so just when a given machine will be in operation that will displace labor. Our normal turnover is about 10% yearly, and if one or more men leave the organization prior to the getting into operation of the new machine, we attempt to get along short handed for a brief period, so that it will not be necessary to discharge anyone when the machine starts up.

(b) As a more definite solution for the problem we have instituted a discharge bonus amounting to two weeks' wages, paid in advance.

V. General Economics of Stabilization.

We are strongly of the opinion that Society must have the final decision as to how any additional cost of unemployment is to be distributed, and we feel that employers must not carry their own stabilization efforts beyond sound economics despite the perfectly natural humanitarian viewpoint. We feel that such steps as we have taken have not increased the cost of manufacture because they have resulted in a highly cooperative working force. Small differences in the amount of cooperation furnished by one's employees can be very much more costly than the application of stabilization measures such as have been enumerated above.

It is our belief that a great deal of the problem is still left unsolved after employers of labor have done everything in their power. The government can be of great assistance in producing more accurate and timely statistics in the control of public works construction activities, the reduction of "bootleg immigration," and economists in general may find some connection between business cycles and fluctuations in the value of the gold standard.

JAMES F. ADAMS.

5. *Transferring Personnel*

Dovetailing jobs by transferring personnel from one job to another or from one department to another is a not uncommon practice and one that has been mentioned in connection with other methods of stabilization in a number of the examples previously cited. The Southern Pacific Company is now making a significant effort to place employees laid off in one division elsewhere in its own organization. By providing free transportation the mobility of the personnel affected is increased. The following account of this plan is taken from "Company Plans for the Regularization of Plant Operation and Employment" prepared by the Industrial Relations Section of Princeton University.

The Southern Pacific Company has recently established a "Central Bureau of Information as to Laid-Off Employees" as a means of stabilizing employment on its Pacific Lines. In the memorandum advising officers of the plan, it is recommended that during the existing condition of unemployment due to reduced traffic, no new employees should be engaged if qualified laid-off employees are available.

The Central Bureau, according to this plan, maintains current information as to employees laid off or about to be laid off and all divisions and departments notify the Bureau when employees of any class, except itinerant labor, are required that cannot be supplied from among employees laid off by that division or department. Upon receiving such notification, the Bureau notifies the division or department nearest the source of the demand which has laid off employees of the class required to respond directly to the officer making the inquiry, sending a copy of the response to the Central Bureau. If the responding officer is unable to supply the employees needed, he notifies the Bureau.

The Bureau attempts to arrange response to calls within twenty-four hours and officers notifying the Bureau of needs for employees are requested to anticipate their needs as much as possible.

Forms have been prepared which are used in the case of each laid-off employee desiring temporary work. These forms bear an endorsement by the immediate employing officer or foreman of any comments as to the employee's service and qualifications and are assembled on each division or district for transmission to the Central Bureau. Measures are taken to insure the use of the Bureau before any new employees are hired.

CHAPTER 2

THE GAINS AND COSTS OF REGULARIZATION [1]

The average business man, skeptical of all proposals that he change the methods of conducting his business, tends to cast a doubting eye on such efforts to regularize as we have described in our last chapter. His verbal reactions to such accounts are generally either "it may be good philanthropy but it won't pay and my business must make money" or "it may be all right for that industry but it wouldn't apply to mine." Both of these objections may really be resolved into one, namely, that regularization is financially impracticable and in a world where management must show profits to stockholders, there is little room for its application. Perhaps even this argument may in fact be merely a conscious rationalization for the sub-conscious wish of the average business man not to have his life disturbed by the problems which would inevitably arise were he to try to regularize his business.

That there are financial costs connected with regularization cannot be questioned. To change consumers' buying habits is an expensive affair which can scarcely be afforded save by the largest companies or by extensive federations of smaller enterprises. Nor is success certain in any such undertaking, and the final result may often be an extensive waste of money on an advertising program with little to show for it at the end. Price discounts to dealers for early purchases and orders are in themselves of course, a reduction in the gross income of the company.

Furthermore, the program of planned and budgeted production itself costs money. In the first place, the office and administrative expenses connected with preparing such a sales and production budget are themselves frequently considerable. Even if we dismiss these as relatively unimportant, there are two more important costs involved in the policy of producing at an even weekly or monthly rate and storing goods during slack seasons, which are to be sold during the periods of concentrated sales. These are the added costs of storage and of interest.

If the goods are to be stored, added space must be provided for them. Unless the company has previously had a considerable amount of warehouse space which was not used, it must build or lease these added facilities. This will cost money. The relative

[1] Prepared by Paul H. Douglas, Technical Adviser to the Commission and Acting Director, Swarthmore Study on Unemployment.

charges will be particularly heavy if the product is one with a low sales value per unit of bulk.

Furthermore, if the goods are to be held for some time before they are finally sold, the company will have to pay the carrying charges upon the investment during this period of time. Raw materials will have been bought and labor will have been paid. But instead of the company being reimbursed for this outlay rather speedily by a quick turnover, it holds its assets in stock for a period. During this time the company must pay interest to the banks for the working capital which it has borrowed, or, if it has financed itself, it must forego the interest on its own funds which it otherwise could have loaned out.

These are very real costs and they should be faced. The businesses which have made a success of regularization, however, are almost unanimous in believing that they have made countervailing savings which have more than offset the costs and that consequently regularization has paid them financially. These savings are of four main sorts.

(1) *Regularization saves because the size of the working force is steadier and it is not necessary to hire so many new workers to meet the seasonal peaks.*

When the working force is allowed to fluctuate with the volume of sales, a great many new workers must of necessity be hired during the rush seasons and be laid off immediately afterward. They are, therefore, green workers, without any real interest in the firm and are in addition frequently overworked by the schedule of long hours. The inevitable result is that their average production is necessarily low because of their lack of experience, and their rate of spoilage is high. This means a very much higher labor cost per unit than if the work were done by experienced hands. Regularized production secured by lessening or eliminating the necessity for hiring these peak workers would permit the work to be done by more experienced and less hurried workers. A lowering of unit labor costs would result. Regularization, in other words, would greatly lessen the costs resulting from labor turnover, since with the removal of that portion which was caused by the instability of jobs, only the portion caused by the instability of men would remain.

One New York firm, in stating to our Committee why it believed regularization had paid, said: "New employees, even if they are what is known to the trade as skilled mechanics, are not even 40 per cent efficient for the first six months." Another company, in contrasting its policy of regularization with the fluctuating forces of other companies, said, "It is impossible to produce the goods as fast as they are sold during the season. If they are, it means overtime, high pressure and poor work with the consequent loss of sales by not having the goods ready when wanted; also a loss of customers on account of poor work due to high pressure and green help."

(2) *Regularization reduces the amount of fixed capital needed per unit of output.*

If the production of a business fluctuates appreciably during the year, then some of the machinery and capital overhead which is used during the peak period will necessarily be idle during the remainder of the year. The annual charges upon this idle capital, in the form of interest, depreciation, taxes, etc., will of course have to be met by the total volume of production with the result that prices will rise or profits be diminished.

If a firm regularizes by filling up the valleys with sidelines or fillers, these units can be produced without any appreciably greater capital costs. Unit costs will, therefore, be reduced and the firm placed in a much better financial position.

If a firm produces evenly through the year, it can, by thus leveling the peaks, reduce the annual amount of capital which it needs. Since the total capital charges will be less, the unit costs, even with the same volume of output, will be less. One New York concern has stated that because of its policy of regularization it is able to get along with 25 per cent less fixed capital than would otherwise be necessary.

It may be objected that since a company which begins to regularize will have extra floor space and machinery which have been accumulated to help meet its peak load, and that since these charges will continue, there will be no economies from regularization. But this ignores the fact that the company can in many instances contract its floor space and machinery, and either rent or sell that which has been given up. Furthermore it is possible for it to finance a considerable growth in its business with little or no addition of fixed capital. This can be done by having the increased production come from what would otherwise have been the unused capacity of the plant during the slack months. The Packard Motor Car Company, for example, was able to handle greatly increased sales after it introduced its policy of stabilization without adding appreciably to the size of its factory or to the number of its machines. The Columbia Conserve Company has also been able to produce a very large proportion of its increased business during what were formerly idle months, and hence has avoided the necessity of increasing its capital facilities to any appreciable extent.

Regularization, therefore, means lower fixed capital charges for each unit of product. Though more space is needed in the warehouse, less is needed in the factory. And since factory space costs more than storage because of its being partly filled with costly machines, while the latter is simply air, it follows that, it is more economical to economize on it than on warehouse facilities.

(3) *Regularization makes it possible to pay a lower than average hourly wage.*

Another economy which regularization effects is that if a firm offers steady work, good employees will come to it, even though its hourly rate is below the general average. Workers are greatly

concerned about having stable jobs, and, if they are given these, they will be content with somewhat lower hourly rates. Firms and industries with a high degree of seasonal irregularity are, as a matter of fact, compelled to pay appreciably above the average because workers know that the jobs will tend to be short-lived.

In Detroit, for example, the hourly rate of the Packard workers is quite distinctly below the general Detroit average and yet the workmen are quite anxious to be employed there because they know that they will get steadier work and their jobs will be relatively safe.

Regularization thus enables the direct labor cost per unit to be reduced as well as the fixed capital charges. The fact that the employers gain from regularization in the form of a reduced wage-rate does not mean that the workers lose. Yearly income is more important to them than hourly rates. The increase in the number of hours which each worker puts in during the year will in general more than outweigh any deficit in the wage rate. The yearly incomes of the workers can and generally will increase at the same time that unit labor costs are diminishing.

(4) *Regularization, by insuring steady work, will reduce the tendency to restrict output.*

When the workers see the busy period slackening, they tend to reduce their output in order to make the work last longer and keep themselves employed for as long as possible. This natural tendency may be checked in part under the piece-rates and "efficiency systems" of payment, but it is nevertheless a powerful force which operates to lower production and increase costs.

Where production and employment have been regularized, the workers are not exposed to this fear, and with its removal they will tend to increase their output. This will, therefore, reduce costs still further.

In summing up, it can be said that in most industries, and subject to the qualifications which will be shortly added, the economies from regularization will tend to exceed the cost. Regularization in general, therefore, is not philanthropy, it is good business. It is unfortunate that in the firms which have regularized, it has not been possible to draw up a balance sheet showing the respective losses and gains. The firms which have been successful seem, however, almost unanimously to feel that their policy has paid financially.

Despite the real advantages of regularization, we should beware of concluding that it can be applied in all industries and to all products. If one studies the companies which have succeeded in their policy of regularization, the five following factors are seen to determine the degree to which the policy does or does not pay;

(1) *The degree to which the product is standardized and immune from style factors.*

Planned production to stock can only be successful if the product is as much in style when it is sold as when it is produced. Most of the firms which have made a success of regularization

produce just this type of standard product. Ivory Soap, the chief product of Procter and Gamble, is the same yesterday, today and tomorrow. Procter and Gamble do not need to worry when they stock their warehouses with it in the winter that it will be out of style by the time summer comes. So is it with Fels-Naphtha Soap, Dromedary Dates, Beech-nut Products, Welch's Grape Juice, Columbia Conserve, Soups, etc. It is significant that the Packard Company, which is the outstanding example of regularization in the automobile industry is also one of the companies which makes very few changes in the fundamental model for its car. Similarly, firms producing Gorham Silver, Community Plate (the product of the Oneida Community), radiators, typewriters, steam shovels, milk pails, filing cabinets, shoe-polish, etc. have been able to stabilize by this method for the same reason. Their goods can be stored without becoming outmoded.

It is far different in the case of commodities which are subject to a high degree of style change. Women's clothing is, for example, almost as perishable as green groceries. Style follows style with great rapidity, and there is no surety that what seems to be in style now will be really desired by the consumer next month. In such a situation as this, it is as impossible for a manufacturer to produce to stock as it would be for a green grocer to try to keep radishes and celery for long periods of time without ice. Nearly all forms of women's apparel are subject to this same fluctuation of style. The women's shoe industry is especially chaotic. Paradoxically enough, part of the difficulty here has been caused by firms which in attempting to regularize, introduced new models to attract the off-season trade. Other firms followed and after a time the industry discovered that the old seasons had been broken up and that a shifting succession of styles had taken their place.

Men's clothing and shoes are more standardized than women's, and hence there can be somewhat more regularity in production and employment. But even here it is difficult to produce much in advance of the season since it is not known what is going to appeal to public taste. In the boot and shoe industry, the increasing importance of the style factor has compelled the abandonment of some previously successful attempts at regularization, notably those made by the International Shoe Company and by the Endicott-Johnson Company. Mr. Jackson Johnson, President of the former company, explains this change in the following terms:[1]

"Until a few years ago, our operations and employment were almost constantly continuous throughout the year. That was possible because our production consisted in the main of shoes of staple character. There was very little change in styles and patterns from season to season or from year to year, and while there were dull seasons for selling and heavy seasons for selling, the fact that our product was staple enables us to estimate our requirements for the year and employ the dull seasons as well as

[1] *Unemployment in the United States*, op. cit., p. 133.

the heavy seasons in manufacturing and storing the shoes that would be required.

"While those conditions existed, we were able to induce our customers to anticipate their needs and through special datings we were able to secure their orders in advance of actual requirements.

"However there has been a radical change in these conditions in the last few years. Our industry now is subject to the same rapid changes of styles that have affected other industries. Our factories which formerly concentrated season after season on staple shoes, must now accommodate their operations to making smaller quantities that are dictated by style and fashion from time to time. Our retail merchants because of these changes in style, can not and will not anticipate their needs. We no longer have any assurance as to future requirements."

Whether the influence of style is becoming more or less important is still uncertain. In the men's underclothing and in the sheeting industries the increased use of colors has beyond doubt made these industries less stable. On the whole it is probable that in the industries producing consumers' goods, variety and style are playing a greater part than before but that in the industries producing capital goods the movement for standardization is reducing the number of separate varieties. In any event, the style factor serves as a distinct limit upon the program for regularization.

(2) The second factor determining the scope of regularization is *The Degree to Which the Product is Subject to Monopoly or Quasi-Monopoly.*

When a concern has a virtual monopoly on its product, it can stabilize much more easily than when there is a high degree of competition. The monopolist can, for example, resist the entreaties of the retailers to introduce variety into his products far more than a manufacturer in a highly competitive industry. He can also determine approximately how long a style will last and can more accurately forecast the probable demand for his product than where there is competition. He can, therefore, produce to stock far more readily then if he had a large number of competitors.

(3) A third element in the determination of how far regularization can go is *the relative cost of storage.*

When commodities have large value in small bulk, such as Gorham Silver, Community Plate, kodaks, films, optical products, measuring instruments, etc., storage costs are not heavy and regularization tends therefore to be a very practicable measure.

When goods, however, are bulky and have low value for each cubic yard of content, relative storage costs are naturally heavier. This will make it difficult to stabilize completely industries producing building materials such as cement, brick, stone, lumber, etc.

An interesting example of this point is seen in the case of automobiles. The Packard has a much higher value per cubic

foot of space occupied than the Chevrolet, the Buick, the Hudson or the Ford. Storage costs are, therefore, relatively less for it than for the cheaper cars. This is at least one reason, though it may not be a sufficient one, why some of the other automobile manufacturers have not followed the example of Packard.

(4) A fourth factor is *the degree of skill required of the workers.* When a high degree of skill is required, the employers will naturally not wish to hire temporary workers for the rush periods who will botch the work. Nor will they want to lose tried and true employees whose replacement is expensive. Such firms will naturally work for a policy of regularization in order to keep their employees and to give them continuous training. It is significant to note how many of the firms prominent in regularization work are of this type. Among these are such measuring instrument firms as Leeds and Northrup, W. & L. E. Gurley, Consolidated Car Heating Company; silver workers, such as, Gorham Silver Company, Benedict Manufacturing Company, the Oneida Community; pianomakers, such as, C. Kurtzmann & Company; optical products, such as, Bausch and Laumb; cameras and photographic materials, such as, Eastman Kodak Company and Agfa Amsco and various cutlery companies.

But where the workers are unskilled, the losses from hiring new workers at the peak of sales and from losing the older workers are not great. The advantages of regularization are, therefore, materially reduced.

(5) The final factor is the relative amount of fixed capital required for each dollar of product. Where the overhead charges are heavy, the pressure for regularization and for continuous employment is correspondingly great.[1] Business men will try to keep steel mills, rolling mills and machine shops, etc., running more steadily than they would flour mills, bakeries and women's clothing factories where the ratio of fixed capital to product is very much less.

Subject to the forces which have just been outlined, regularization can be made to pay in industries for which such policies are best adapted and could without doubt be much more extensively practised than is at present the case.

In concluding our discussion of the gains and costs of regularization, we may perhaps turn from computing these in terms solely of their importance to the employer to a concluding query from the social point of view. It is this. The process of regularization tends to diminish the maximum number who are employed in an industry. It is very rarely that stabilization can be solely effected by filling up the valleys. Some levelling of the peaks seems almost invariably to occur. What then happens to the men who formerly obtained some work in the industry? Where can they find work? Is the net effect of regularization to throw these employees completely out of work and thus to obtain stabilization for some workers at the expense of others? These questions

[1] See J. M. Clarke, *The Economics of Overhead Costs.*

are very similar in nature to those which arise in connection with improvements in technical processes and in conjunction with the pooling of labor reserves by a system of public employment offices. Ultimately these apparently unemployed workers can find openings from one or more of the following causes: (1) the lower unit costs which an industry would realize through regularization would lead to some reduction in price. This in turn would cause more units to be demanded and would help absorb some of the workers on a steady rather than a temporary basis. How many would be absorbed would depend not only on the relative reduction of costs and prices but also on the degree to which the quantity demanded responded to changes in price; (2) the surplus labor could be combined with the unemployed capital of which there is a considerable percentage and with the fresh savings of capital and thus find employment; (3) the surplus supply of labor could bid for work by taking lower wages, and with this general fall in wages, industry could absorb more workers so that the ratio of labor to capital would be greater than before. This would indeed probably happen.

But the fact that the hourly rate of labor had been forced down still further by the workers who were squeezezd out would not necessarily mean a diminished yearly income. This would in fact probably be larger since the national income would be increased (a) by the output of added workers who formally were unemployed and (b) by the increased output of those who continued to be employed. Even though the hourly rate would be lower, the increased volume of employment would in all probability give labor an appreciably larger annual income of goods and services. A gain in real income would in all probability accrue.

The following are the opinions of employers who are attempting to stabilize employment of the gains and costs of their regularization programs.

A Financially Successful Program of Stabilization in a Style Dominated Industry

W. B. COON CO.

Rochester, N. Y.

August 5, 1930.

"In manufacturing women's shoes, our plan works out on a staple product, but in high style lines with frequent changes in material and patterns, it would not do so well. Our line used to be almost entirely staple, but in the last few years demands from the trade have forced us to put more style into it, and we cannot now keep our production as even as we used to.

"There is no question in our minds but what steady production with storage of finished goods in the slow selling periods will make enough saving in overhead and labor turn-over to more than offset charges for storage and borrowed capital. We have no figures to prove this but base our opinion on the fact that we have successfully operated a stock department for a long period of years.

"Style changes do leave us with broken lines that we have to job off. We watch sales very carefully and when a number begins to slow up we act accordingly."

Gains from Stabilization in the Manufacture of Bathing Suits

THE OCEAN BATHING SUIT CO.

New York City

August 8, 1930.

"It would be difficult to give you figures to justify running our factory on a more or less uniform production schedule throughout the year. The style element is very important and production during the non-selling period is confined almost exclusively to staples. The increased use of style garments in Florida gives us positive information early in the winter and enables us then to produce a stock of some of those suits.

"If we were to produce during only part of the year, it would require an increased investment in machinery and larger space to attain our sales volume.

"In normal times, our labor turnover is largely in our own control. Those that we intend to keep on our permanent force are, to a large extent, with us for a number of years.

"Our savings come under the head of retaining experienced workers, reduced investment in plant and equipment and lowered rental. Offsetting these are losses entailed when we are incorrect in our stock and interest on investment. Greater losses are entailed if the prices of our raw materials decline and we cannot liquidate the made up stock at profitable prices. Of course, some years it is in our favor when raw material prices advance."

Why a Manufacturer of Clothing for Hunting Believes that Regularization Pays a Profit

THE DRYBAK CORPORATION

Binghamton, N. Y.

"We might say first that our principal product is hunting clothing, the retail sale of which is confined largely to four months of the year and which we distribute thru the sporting goods, dry goods and hardware wholesalers.

"Most of our trade is solicited on this business from January to April and up to six or seven years ago, we were able to obtain in these months orders for stock requirements to be shipped from July to September. Since then, however, the wholesaler's policy in buying ahead has changed considerably and because of the heavy repeat orders which developed as a result of the tendency to place smaller stock orders, we were forced to make up large stocks during the late winter and spring months in order to take full advantage of all business which came in between the first of September and the middle of November, for to have continued our policy of manufacturing the bulk of our orders as they were received would have meant an almost idle factory for four or five months of the year with a later demand well beyond its capacity.

"It is practically impossible for us to give you any definite figures as to what the savings or additional expenses might be as a result of our policy of making up stocks during the lean months of the year. We can make the following general statements:

"1. Investment in equipment may be reduced in a business of a seasonable nature because if the demand is anticipated by the manufacturer, the high productive capacity otherwise required may be curtailed. To a certain extent, the space needed for equipment which may under such a plan be discarded can be utilized for the storage of stocks.

"2. The carrying of stocks can be advantageously used as a sales argument to induce customers to drop articles made special to their order so that they may get the benefit of quick shipment and capital turnover which would naturally result.

"3. Not only is labor turnover greatly reduced by the balancing of production, but it is possible for a manufacturer to take advantage of a lower labor cost. When the factory is operated to manufacture orders as received, it is almost necessary, particularly in such a seasonable business as ours, to pay a premium in labor rates to operators so that the wages they might earn during a short peak season are sufficiently attractive to draw them away from competitive local manufacturers when their services are in demand by us.

"Other advantages which we see in our policy are better workmanship and quality of finished garment, the opportunity to select the most skilled operators, and from a sales viewpoint the natural tendency there is on the part of distributors to favor those concerns who are in a position to help the distributor to reduce his own capital investment by giving him prompt and quick service on orders which he may place. On the other hand, the policy is quite a costly one for the manufacturer in the matter of capital investment, and those that are not strong financially are hardly able to secure the bank credit necessary to take full advantage of such a policy."

Testimony on the Gains from Stabilization from a Manufacturer of Photographic Supplies

AGFA ANSCO CORPORATION

Johnson City, N. Y.

August 5, 1930.

"I note that some of the manufacturers do not like our system of steady employment on account of the extra cost of storing the goods and bank credits.

"Almost every business has its season. It is the writer's opinion from forty-three years experience, that it is impossible to produce the goods as fast as they are sold during the season. If he does, it means overtime, high pressure and poor work with the consequent loss of sales by not having the goods ready when wanted, also loss of customers on account of poor work due to high pressure and green help.

"This surely is not good business and such a loss amounts to more than the loss of interest on money represented by goods held in stock. Another fact is, that by steady employment, the turn over is at least 50% less, second, the operators are made more efficient, and thereby enabling one to produce the goods cheaper and much better in quality."

Why One Employer Believes that Stabilization Pays

THE SHERIDAN IRON WORKS

Champlain, N. Y.

August 1, 1930.

"One of the biggest items in manufacturing lines today as you know is a question of labor cost, and of course with this commodity, there is a chance of sudden changes either up or down. But, it has been our policy when employing mechanics to impress upon them the fact that we have steady employment throughout the year. Therefore, we do not pay the same rate of wages as they do in the large industrial centers, and it has been our experience, that the average men are willing to work for 10% to 15% under the market figures, if they are assured of steady employment with honest treatment. We believe that this policy is the best, as we train the majority of our mechanics, taking them in as apprentices. A good many of them leave at the time the apprenticeship is up and secure excellent wages in the large industrial centers, over 95% of these young men return to us sooner or later, and it has been a matter of record that after they return they are better satisfied than ever.

"In hiring new employees, even though they are what is known to the trade as skilled mechanics, it has been our experience that they are not over 40% efficient for the first six months. This of course may sound

rather strong, but as our line of work is entirely of a special nature, one must work at it for a considerable period, in order to become efficient as is required to carry on the manufacturing business on a profitable basis. Of course this condition would not exist in all manufacturers' plants, as a great many plants are called manufacturing plants and in reality they are only converting plants and do not produce from the raw materials to the finished article, plants of this nature could not apply the same line of reasoning as we do.

"In addition to building machinery for storage, we endeavor during periods of slackness to keep approximately 15% of our force busy, which usually is a period of about '3 months' on new and experimental work, so that when business picks up we are in a position to have something new or improved for the market that is needed. Our plant will only take care of approximately 75% of our monthly sales during the active seasons and by having 25% of the year's supply of goods on hand, we eliminate a very heavy overhead, without a large plant, at the same time are able to give delivery which keeps us solid with our trade.

"The advantages mentioned above we have figured more than offset the interest on goods in storage and the amount necessary to keep the factories in full operation at all times, as any well governed concern knows that there is a certain amount of overhead charges that have to be kept up, whether the plant is running full or only partly or shut down entirely."

The Economies of Stabilization in the Foundry Industry

BUFFALO FOUNDRY AND MACHINE COMPANY

Buffalo, New York

August 2, 1930.

"While it is true that the cost of storage is a large item and it is also true that banks look askance at abnormal inventories, still we feel that we are actually saving money by manufacturing for stock. We are enabled to keep our personnel of key men intact, and, furthermore, we are frequently able to make spot shipments from stock and thus obtain orders that might go to our competitors in the event that we could not make immediate shipment.

"Please bear in mind that we are in reality a custom shop and therefore do not follow this policy in connection with all of our lines. It would be impracticable for us to manufacture castings and various special machinery lines for stock as very frequently either the machines themselves or the auxiliaries are special, and, if we followed this idea too far, we would find ourselves with a lot of unsaleable stock on our hands. We do manufacture, however, certain stock atmospheric and vacuum drum dryers which are standard and which are fabricated in advance generally."

The Economies of Regularization for Foundries

ENTERPRISE FOUNDRY COMPANY

Auburn, N. Y.

August 26, 1930.

"Replying to your communication of August 22nd, asking in substance why the policy of making stock castings at certain periods of the year should prove beneficial from a manufacturer's view point. The writer perhaps should have amplified or more clearly stated his reasons for stocking castings in an endeavor to keep our shop in full employment.

"Personally we have found this policy (stocking castings) very satisfactory in the past. You must bear in mind however that we are a jobbing foundry and to make a foundry pay we find that a certain tonnage must be produced for the simple reason that it would take practically the same amount of labor (outside of moulding) and fuel to melt ten ton as it would to melt two to four ton additional. Therefore, you can readily see that one reason is to lessen the expense of production by keeping up our tonnage.

"Then we find that in a foundry (we suppose this refers to all shops) that it is much better for shop discipline to keep the men doing something rather than to let them fall down on a given production for if a production is allowed to sag it gradually establishes a precedent which later when the foundry becomes busy it is very hard work to overcome both in the physical and moral make up of our employees. The second reason, therefore, is that it improves the morale of our men. In addition to the above mentioned reasons we have a number of patterns that can be placed in the sand for stock castings, work that is generally conceded as staple and without much of a chance of any changes being made in the patterns. We refer now to sewer work such as manholes, catch basins, coal hole openings, etc. As we have an extended business in this line we can make up a considerable tonnage of this class of work which would be beneficial only to a factory of our type. We have a number of customers that we make castings for whose castings we are in the habit of stocking in limited quantity. We take all the responsibility but we find that over a period of time our policy has paid, and we are able to make a very prompt delivery. At certain times of the year we become quite busy and certain types of castings that are intricate and hard to manufacture are the types of castings we generally try to make up so that when our customers are in need of these castings they are not held up due to the fact that such patterns are slow to produce. The statements as outlined above are the principal reasons that we manufacture stock castings in periods of depression.

"We find, however, objections due to the fact that certain space must be procured for storage and also the cost of bank credit which we appreciate is considerable. In our own case our premises are large enough to take care of the stock castings which we produce. In direct answer to overcoming the cost of bank credit we have found that first, the steady employment enabling one to produce to full capacity naturally cuts the expense of running our foundry to a considerable extent. Secondly, the reasonably quick delivery we are able to make our customers is certainly an added asset which we find appreciated by them. In the third place our foreman, superintendent and office force are employed on a year round basis as are certain overhead expenses. These must be paid regardless of whether the foundry or factory is working steadily or not. We find by the full tonnage program that it pays due to the fact that the officers renumerated by the year have the opportunity of doing something for their money and the office force will in time have the opportunity of billing out the stock castings.

"The only bad feature of course is the danger of our customers changing or altering some of the patterns. But even in cases like this our customers in most cases agree to take the casting we have made up before major alterations are made."

Why a Manufacturer of Shoe Polish Believes that Stabilized Production Pays

THE GRIFFIN MANUFACTURING CO.

New York City

"If we produced at the same rate that our goods were sold, the factory would want to be equipped to handle our maximum demand. During slow periods, our machinery would be idle or working at a small percentage of capacity. Our factory is not equipped to handle our business during peak seasons. The exact amount of money we save in investment in fixed assets from not being equipped for maximum production, is not known. We know that, together with less space now required, we effect considerable savings.

"Under our present system of full time employment, we have reduced our gross factory payroll approximately fifteen per cent. The individual worker's pay has risen. We do not employ so many now as when we operated under the old system. Our production has increased."

The Economic Gains of Stabilization for a Firm Producing Measuring Instruments

W. & L. E. GURLEY

Troy, N. Y.

"There can be no question but that a uniform production policy requires less fixed charges and less investment in fixed assets than a varied production policy in which the condition of the market governs the amount of production. In other words, leaving out the matter of interest on inventory, a fixed production policy involves a minimum of capital in fixed assets; or a minimum of charges against fixed assets over a period of years.

"So far as direct labor and over-head is concerned the sum total cost of manufacturing over a period, say, of ten years, would be practically the same regardless of the policy that is pursued. Practically the only problem involved in establishing a uniform policy of production is reasonable control of inventory. The saving in labor turn-over is a factor and the ability to reduce this saving is a factor in such problems. Taking all in all, concerning the tangible and intangible factors involved, I believe it is more economical to base a uniform production policy over a period of ten years than a varied production to meet the market conditions.

"I am simply giving the above as my own impression of business such as ours, which is seasonable and also varies somewhat from year to year. It is extremely difficult during these trying times to adhere to such a policy. While our organization closes down for two weeks each Summer, we have closed down for a month this year, and it is my intention, when we open up in September, if necessary, to work short time in September and possibly October, and give our men full time during the Winter.

"I believe if the management of industry would look at the problem of unemployment with a certain amount of civic interest mixed in with the economical end of business that things would run much more smoothly than they do now, and that in the long run it would be more profitable to all concerned."

Though the Costs of Storage are Great, a Manufacturer of Metal Products Believes that the Economies Over-Balance Them

THE REPUBLIC METALWARE CO.

Buffalo, N. Y.

"We have been in business for over 94 years. Many of our articles are staple articles and of more or less of a seasonable character. For instance, we make Sprinkler Cans in the winter for shipment in the spring and Coal Hods, Coal Shovels, Stove Pipe Elbows, etc. in the summer for delivery in the fall.

"We make several thousands of articles which are only more or less seasonable and a few which have a fair volume the year round such as Galvanized Pails and Tubs. We rely on a table of experience to a great extent. It has been necessary always to have large stocks and we have a sizeable warehouse. The sad thing about it is that it is very expensive and raises the cost of distribution very much to carry such quantities of goods, which take up a lot of room because they can not be nested.

"We regret that we have not at hand any figures to indicate the savings in labor turnover and prefer not to offer any figures in regard to investment of fixed capital because the controlling elements have recently been so erratic that it is a question whether any such figures are reliable.

"Any person who has to do with personnel realizes the different difficulties in building up production when it is necessary to engage a group of new people. We regret that we are not able to reduce it to a dollar and cent basis in a way to justify advising you."

Why a Heating Apparatus Company Believes that Its Regularization Policy Pays

INTERNATIONAL HEATER COMPANY

Utica, N. Y.

August 20, 1930.

"In our line of business we normally ship out 50% of our 12 months' volume in the four months of August, September, October and November.

"If we were to withhold production in the early months of the year and rush production in the later months of the year to meet this heavy shipping demand, it would require a much heavier investment of fixed capital in the way of machinery and equipment which would be in use but a comparatively short period of the year, and in addition it would be very difficult to recruit a skilled labor force to meet the situation.

"It would be difficult for me to indicate in a percentage the savings which would accrue and do accrue from steady operations of our factory. To retain skilled labor, and keep it in a happy frame of mind, requires steady employment which enables the employee to adjust himself to a steady income, whereas, if the operations are intermittent he is unable to foretell what income he will receive and is sure to secure employment even though it pays less if he can be sure of regular employment with the consequent regularity of income.

"Where a factory is operated fitfully, seven or eight months of the year, and then crowded in every department for three or four months the results are most unsatisfactory to everyone concerned and while it is true that it costs money to manufacture goods and place them in storage, the real saving thru reduced overhead which results from continued operations of the factory far offsets the cost of the interest on the amount of money tied up in the goods in storage.

"While this policy might not work out satisfactorily in the lines where there are sudden changes of style or variations of the cost of raw materials entering into the product, it does work out most satisfactorily in a line like our own where such changes do not occur.

"Where production schedules are laid out with a view of obtaining a steady, continuous production, even though that production may be on a substantially reduced scale from the normal capacity of the factory, it is possible to adjust overhead expenses in such a way as to keep them at a minimum in a way not possible where the production for several months may be intermittent and then suddenly jump up to maximum output."

Further Testimony on the Economies of Regularization

EXCELSIOR QUILTING CO.

Long Island City, N. Y.

August 22, 1930.

"You are correct in the assumption in the second paragraph of your letter that our policy of even production throughout the year as far as possible makes it necessary at times to store a surplus of our products. This of course has disadvantages as well as advantages. The disadvantages were particularly apparent this year when as you are fully aware prices of all commodities have been on the downward trend practically continuously. This means that goods manufactured the early part of the season were from considerably higher cost raw materials than goods manufactured at the present time and this of course has necessitated in the reduction of inventory values. It would be rather difficult to give you any figures of definite value regarding savings in dollars and cents or other economies which would be effected by a year's run on normal production. While we of course endeavor to keep production at all times as nearly normal as possible in order to insure steady employment for our operators and at the same time to reduce our overhead, it might not be fair to use our particular case as an example in any way (as our production capacity is not great enough to take care of orders at the peak). It is necessary for us to build up a reserve stock of finished goods in the slack periods in order to have sufficient material on hand to fill orders in the good periods."

Regularization Permits the Use of a Smaller Fixed Capital

STANDARD OILED CLOTHING CO. INC.

New York City

August 21, 1930.

"I can readily understand why some manufacturers would object to following the same policy that we follow in reference to manufacturing ahead.

"Our product is absolutely a staple one and is used year in and year out, volume depending considerably on the amount of precipitation, while the products of other manufacturers of wearing apparel are subject to season and style changes.

"In addition to this, they are absolutely correct regarding the additional cost of the product due to storage, bank credit and also insurance.

"We do not believe that we effect any savings whatever in labor turnover, nor does our policy offer any other economies.

"Our policy simply puts us in a position to take care of the demand for our product which in the Fall of the year is usually greater than our manufacturing capacity.

"Replying to your further inquiry, we would say that we do not make any attempt to establish what our probable next year's sales will be and our production for the following year is based solely on how much our stock has been depleted at the end of the year's business."

Stabilization Shows Gains Where the Workers are Skilled

NEPTUNE METER COMPANY

Long Island City, N. Y.

August 21, 1930.

"This is the first year that we really had a chance to try out our policy of even production from one year's end to the other, and as I stated in my letter of April 16th, we are having very good results.

"We have been able to run practically from January 1st to date without any shut-down, and with approximately the same number of people. It is true that at times our inventories at the branch offices are a little higher than business would warrant, but this only occurs in the first part and the latter part of the year. It is very hard for us to give the actual savings in labor turnover, investment of fixed capital, etc., but we do know that our labor turnover for this year has been the lowest it has been in a number of years. Our average has not been more than 2% and in most cases less than the average."

Regularization Greatly Reduces Turnover Costs in an Industry Requiring Skilled Workmen

C. KURTZMANN & COMPANY

Buffalo, N. Y.

Pianos

August 13, 1930.

"A policy of regularized production such as that which we have heretofore used, assures competent workmen, maintenance of quality and eliminates labor turnover almost entirely. In our industry, it costs us approximately $100 to train a young man, joining the organization, for first operations which can be entrusted to him, and costs from three to as much as five hundred dollars to train men for more skilled positions. As long as this is true, and it probably will continue to be true in the piano industry, it is quite obvious that high labor turnover represents a tremendous wastage of money."

The Economies From a Stabilized Working Force

EASTERN TABLET CORPORATION

Albany, N. Y.

August 8, 1930.

"It is true that carrying out a policy of stabilized employment entails considerable cost for storage. The matter of bank credit also has to be given consideration. In our particular business, however, there is hardly any other way to make a success of it as it is of a very seasonable nature and we tried for years to manufacture our product only as it was ordered. This meant taking on a large crew of extra people for a short time during the summer months and during approximately six months of the winter it was necessary to trim our force and also our working hours. This caused trouble from a great many angles.

"One of these was that due to the large number of inexperienced help which we had during the summer a great many mistakes were made and these amounted to a considerable sum. We also had a very large labor turnover, as it was hard to secure help that was willing to work at an excessive rate of speed during, say, six months of the year and on three or four days a week schedule during the balance of the year. While we do not have the exact figures to give you, we are very well satisfied that we could not have continued had we not changed our policy."

A Further Belief that Regularization Pays

THE CARBORUNDUM COMPANY

Niagara Falls, N. Y.

"Due to the fact that we have had an even production policy for some years, and also to the fact that we have never made a study of the cost of labor turnover, we are unable to state the savings due to such a policy.

"We have never approached the matter of even production from the standpoint of cost of storage and bank credit, possibly due to the fact that we have been fortunate in the amount of money with which to do business.

"The thought we have had in mind is to give our regular employees continuous employment, as we feel sure that the added cost in material and storage is offset by the better feeling created among employees and their willingness to put forth extra effort and do overtime work when we are hard pushed with incoming orders."

Even Construction Work Can be Carried on Much More Steadily During the Winter Than is Commonly Supposed

THE BROOKLYN UNION GAS COMPANY

Brooklyn, N. Y.

August 6, 1930.

"Winter construction does not cost any more than summer construction if the ground is not frozen.

"Men get more work done in cold weather than in extremely hot summer periods.

"If a winter of great severity came upon us, construction costs might be prohibitive. In such a case we would have to reduce construction for a short time."

CHAPTER III

Unemployment Insurance and the Stabilization of Wage-Earners' Incomes During Periods of Unemployment

A. *American Plans.*

1. Unemployment Insurance Plans in the United States.
2. Unemployment Insurance in the Men's Clothing Industry of New York City and Rochester.

3. The Unemployment Insurance Plan of the General Electric Co.
4. The Dismissal Wage.
5. A Proposal for a Dismissal Wage. (By Ernest G. Draper.)

B. *Foreign Systems of Unemployment Insurance.*

6. The Ghent System of Subsidized Voluntary Unemployment Insurance.
7. Unemployment Insurance in Great Britain.
8. Unemployment Insurance in Germany.

A. American Plans

1. *Unemployment Insurance in the United States* [1]

There are three types of voluntary unemployment insurance plans in the United States: (1) union, (2) employer, and (3) joint. The total number of workers included under these plans on September 1, 1930, was approximately as follows:

Type of Plan	*Approximate Number of Workers Covered*
Union	34,700
Employers	84,000
Joint	77,500
Total	196,200

This number is less than 1 per cent of the workers who normally would be eligible for such protection.

The union plans are strongest among the highly paid photo-engravers and among the printers and pressmen of New York City. The benefits of the photo-engravers run from $12.00 to $30.00 a week with the number of weeks of benefit ranging from 12 to 26. Typographical Union No. 6 of New York maintains a system on the basis of an assessment of ¼ of one per cent of earnings which gives benefits of from $8.00 to $14.00 a week for a maximum of 7 weeks during the summer slack season. The pressmen's local of New York has a somewhat similar provision. A number of locals in the Bakers' Union also pay benefits, notably those in Buffalo, St. Louis, and San Francisco. The out-of-work benefit of the International Cigar Makers' Union was abandoned in 1920, and in all only slightly over 1 per cent of the membership of the American Federation of Labor are included in the trade-union plans. The total sums paid out annually range from $350,000 to $450,000 a year.

Prior to the establishment of the General Electric plan of unemployment insurance during the summer of 1930, there were 11 companies with their own plans of unemployment compensation. These firms employed 11,200 workers, but slightly less than 9,000 were eligible for this protection. Two of these plans, those of

[1] Prepared by Paul H. Douglas.

Procter and Gamble and the Columbia Conserve Co. were really plans for guaranteed employment, the former guaranteeing 48 weeks of work to its more permanent employees and the latter guaranteeing 52 weeks of pay. Two plants, those of the Rockland Finishing Co. and the American Cast Iron Pipe Co. once had such plans but have abandoned them. Of the active insurance plans, those of Dennison Co., Dutchess Bleachery, Crocker-McElwain and Leeds and Northrup are the most important. The first two are financed by original contributions which are being slowly depleted. The Dennison Co. pays 60 per cent of their previous average earning to workers without dependents who are completely laid off and 80 per cent to those with dependents. Allowances are also made for part-time and for loss of earnings on jobs to which the workers are transferred. The Dutchess plan now pays 50 per cent of earnings for all hours less than 35 which are worked per week with the provision that the income of the workers shall not fall below 24 hours pay or half-time. The length of the benefits under the Leeds-Northrup plan is graduated according to the previous service of the worker with the company. The total sum paid out by private firms in unemployment benefits up to the end of 1928 was only $331,000, or one-half of one per cent of the total payroll during the period in which the several plans had been in effect.

It is interesting to note that prior to the introduction of the General Electric plan, there were more than six times as many workers in England under voluntary plans, which gave benefits in excess of those provided by the unemployment insurance acts, than there were in the United States. Even now a slightly larger proportion of the British industrial workers come under the voluntary plans than in the case here.

The chief examples of joint plans between unions and employers are those in the Chicago, Rochester, and New York markets of the men's clothing industry. The plans in the men's clothing industry will be discussed in greater detail later.

In Cleveland employers agree to give 40 weeks of employment or to pal one-half wages for the time under 40 weeks which they fail to provide. In practice the actual payments have been small, and the employers have provided the employment guarantee. The guarantee could not be maintained for outside workers and these suffer from a low level of employment, the 1 per cent assessment upon the market being insufficient to protect them. The recently established plan in the unionized branch of the full-fashioned hosiery industry provides for the payment of 1 per cent of the payroll by the employers for the first year and after that a contribution by the workers equal to one-half that of the employers.

2. *Unemployment Insurance in the Men's Clothing Industry of New York City and Rochester.*

By negotiation between the Amalgamated Clothing Workers and most of the manufacturers of men's clothing in New York City and Rochester, unemployment insurance funds have been set up

for the workers in the men's clothing markets of these two cities. Many of the details in these plans have been adopted from the pioneer experiment in the Chicago clothing market, where since 1923 nearly five and a half million dollars have been paid out in benefits. There are, however, certain differences between these plans and that of Chicago: notably, (1) whereas the Chicago fund is based upon the joint contribution of both parties, in these two funds only the employer contributes. (2) The rate of contribution to the New York and Rochester funds is less than for the Chicago fund being only 1½ per cent of the payroll as compared with the 4½ per cent assessment for the latter, two-thirds of which is borne by the employers. (3) The distribution of the benefits in Chicago is subject to relatively fixed and automatic rules while in New York and Rochester because of the relative smallness of the amounts, the attempt is made to relieve as much distress as possible and hence the distribution of the amounts is largely at the discretion of the trustees and is in practice similar to poor relief.

The New York system in turn differs from that of Rochester and Chicago in that because of the relatively small scale of the industry, the fund is a pooled market fund for the relief of clothing workers, irrespective of the union shop where they are employed. In Rochester and Chicago on the other hand, the fund is primarily conducted on an establishment basis and assessments collected from a given company are used for the benefit of the workers in that company alone.

The amounts distributed under these two plans have been as follows:

New York City

Time	*Amount*
April, 1929	$75,000
September, 1929	130,000
April, 1930	150,000
September, 1930	100,000
Total	$455,000

Rochester

May, 1930	$113,800

The agreement in the New York industry setting up the fund is appended.

FORM OF AGREEMENT
ESTABLISHING
UNEMPLOYMENT INSURANCE FUND
NEW YORK CLOTHING INDUSTRY

MEMORANDUM OF AGREEMENT, made this..... day of .....by and between ..... (hereinafter called the Manufacturer) party of the first part, and the AMALGAMATED CLOTHING WORKERS OF AMERICA (hereinafter called the Union), party of the second part;

WITNESSETH:

Whereas, arrangements are being entered into between the Manufacturer and the Union with reference to wages and working conditions; and similar arrangements are being entered into between the Union and other clothing Manufacturers in New York; and

Whereas, other agreements similar to this one are to be entered into between the Union and by all other clothing Manufacturers in New York City employing Union labor; and the parties hereto are desirous of mitigating the effect of unemployment;

Now, Therefore, in consideration of the entering into the arrangements and agreements herein above recited and in consideration of the premises and of the mutual covenants herein contained, it is agreed by and between the parties hereto as follows:

ARTICLE I. The Manufacturer agrees to pay weekly, beginning with Sept. 1, 1928, to the Board of Trustees, one and one-half per cent of the total labor cost of all the clothing manufactured for him, whether his clothing is manufactured in his own inside shop or in contract shops. By labor cost is meant the total weekly payroll of the Manufacturer's Union employees working in his inside shop plus total weekly payroll in contract shops applicable to his garments.

ARTICLE II. The obligation undertaken by the Manufacturer for the payment of sums to the Fund as provided for herein shall be on a parity with and as valid and enforceable as is his obligation to pay wages to his Union employees.

ARTICLE III. All sums so received shall be held in trust by the Board of Trustees subject to all the terms and conditions of this agreement, and such sums, and the income therefrom shall be held as a special Trust Fund, designated as "New York Clothing Unemployment Fund" hereinafter referred to as the "Fund." Payments from this Fund shall be made to members of the Union as unemployment benefits from time to time and under such terms and regulations as may be adopted hereafter by the Board of Trustees.

ARTICLE IV. No benefit which may accrue to any Union employee acquired by virtue hereof, can be assigned, transferred, alienated, hypothecated or bartered away, directly or indirectly, or be subject to attachment, garnishment, execution, sequestration, seizure, or other process. The Board of Trustees, or the Union, or any agency designated by it, may, however, pay any benefits to which a deceased Union employee might have been entitled to such person or persons as the Board shall in its absolute discretion determine, and no heir, next of kin, legal representative, creditor or claimant of any such decedent shall have any right or claim to any such benefits.

ARTICLE V. Neither the Manufacturer nor the Union shall have any right, property or interest in the Fund. Nor shall the Fund be subject to attachment, garnishment, execution, sequestration, seizure, or other process by reason of any claim on behalf of any person whatsoever against either the Manufacturer or the Union, or any Union employee.

ARTICLE VI. The Manufacturer and the Union agree at all times, during the continuance of this agreement, to keep such records as may be necessary for the proper administration of the Fund, and also to provide the Board of Trustees and the Union or its agency designated by it with such information and records as they may require or deem advisable for the proper performance of their duties.

ARTICLE VII. (a) This agreement shall be for the period of three years from June 30, 1928, to June 30, 1931.

(b) If (1) this agreement is not renewed at its expiration or if (2) the Manufacturer shall prior to the termination of this agreement cease to carry on business by dissolution, winding up, or in any way other than by sale, merger or consolidation, then upon the happening of either of these contingencies or the termination of this agreement, by lapse of time, or in any other way, the payments herein provided to be made to the Board of Trustees shall cease, but the Fund shall continue to be administered in the same manner in which it was administered during the life of this agreement, provided, however, that there is at least one agreement similar to the present still in force. In the event, however, that all agreements similar to the present and

including the present are terminated in any way so that there is no remaining agreement in force, then the entire amount of the Fund shall be disposed of by distributing the Fund, as unemployment benefits, among Union employees in the industry. In New York, within five years from the date of the termination of the last agreement.

ARTICLE VIII. If any law or ordinance is passed compelling the Manufacturer to contribute to any federal, state or municipal unemployment Fund with reference to any employees hereunder, the payments of the Manufacturer herehereunder shall be reduced by the amount which the Manufacturer is compelled to pay to such federal, state, or municipal unemployment Fund. If the payment which the Manufacturer is compelled to make to any such Fund is equal to or greater than the payment required of the Manufacturer hereunder, then the obligation of the Manufacturer to make payment hereunder shall cease, and in such event the Fund shall be disposed of in the same manner herein provided for disposition at the expiration of this agreement.

ARTICLE IX. It is the intention and understanding of the parties to this agreement that there shall be one common Unemployment Fund for all the Manufacturers who may enter into similar Unemployment Fund agreements with the Union. This Fund shall have a single body of trustees which shall be selected as follows:

No more than three to be selected by the Union and no more than three to be selected by the New York Clothing Manufacturers' Exchange—(each shall appoint an equal number). The trustees selected by the Union for the Fund shall represent the Union under this agreement as well as under other Unemployment Fund agreements entered into with other clothing Manufacturers in New York; the trustees selected by the New York Clothing Manufacturers' Exchange shall represent the Manufacturer in this agreement, as well as in other Unemployment Fund agreements entered into with other clothing Manufacturers in New York. In addition to the trustees thus selected there shall be a Chairman of the Board of Trustees and the Impartial Chairman of the Clothing Industry in New York is hereby designated as Chairman of the Board of Trustees. He shall not be removable except by the joint act of the New York Clothing Manufacturers' Exchange and the Union. The number of trustees may be changed from time to time by the joint act of the New York Clothing Manufacturers' Exchange and the Union, but there shall not at any time be less than three (3) trustees nor more than seven (7), and the number of trustees shall at all times be odd.

ARTICLE X. (a) Any trustee may at any time resign from the trust hereby created by giving written notice of such resignation personally or by mail, addressed to the last known post office address of the remaining trustees. Should any of the trustees designated by the New York Clothing Manufacturers' Exchange die, resign, become incapacitated or unable or unwilling to act, or be removed, the vacancy so occurring shall be filled by the appointment of a successor to be named by the New York Clothing Manufacturers' Exchange. Should any of the trustees designated by the Union, die, resign, or become incapacitated or unwilling to act, or be removed, the vacancy so occurring shall be filled by the appointment of a successor to be named by the Union. All trustees appointed to fill any vacancy hereunder shall be vested with all the rights, powers and duties herein and hereby vested in their predecessors. Should the Chairman of the Board of Trustees die, resign, be removed, become incapacitated, unable, unwilling or fail for any reason to act, then the vacancy so occurring shall be filled by the appointment of a successor named by the New York Clothing Manufacturers' Exchange and the Union, and if they are unable to agree upon such successor within a period of thirty (30) days such vacancy shall be filled by the appointment of a person designated by Honorable Julian W. Mack. Until the appointment of a successor Chairman of the Board to fill such vacancy, the remaining trustees shall exercise all of the powers and perform all of the duties of the Board of Trustees. The appointment of any trustee hereunder shall be in writing delivered to the remaining trustees or their successors. If all the trustees designated by the Union or by the New York Clothing Manufacturers' Exchange, as the case may be, shall not be present at any meeting of the trustees, the trustee or trustees designated by the New York Clothing Manufac-

turers' Exchange or the Union, as the case may be, present at such meeting, shall be entitled to cast as many votes or the same number of votes as the trustees designated by the other party present at said meeting shall be entitled to cast, it being the intention hereof that at any meeting of the trustees, regardless of the number present, the trustees representing the New York Clothing Manufacturers' Exchange and the trustees representing the Union shall have equal voting power.

(b) All questions that may arise or come before the trustees shall be determined by the affirmative vote in person or by proxy or a majority of the trustees. Such vote may be given in meeting assembled or by a writing signed by the trustees, or by a majority of them, provided such writing is signed by one or more trustees designated by the Union, and one or more trustees designated by the New York Clothing Manufacturers' Exchange, and such decision or act of a majority of the trustees shall be binding and conclusive upon the parties hereto, the Board of Trustees and the Union employees. Any trustee may act by proxy. Any trustee may call a meeting of the Board of Trustees by giving at least five (5) days' notice in writing of the time of holding such meeting and having a copy thereof personally delivered to each trustee, or by mailing the same, postage prepaid, to the last known address of each trustee. Meetings of the Board of Trustees may be held at any time, without notice, if all of the trustees consent thereto.

(c) None of the trustees shall be entitled to compensation hereunder.

(d) Whenever the trustees or Board of Trustees are referred to herein, it is intended that such term shall include the trustees or Board of Trustees for the time being in office.

(e) The Board of Trustees shall keep true and accurate books of account and records which shall be audited by certified public accountants at least twice in each year.

(f) Each of the trustees shall be protected in acting upon any notice, request, consent, instruction, certificate, affidavit, resolution, opinion, receipt, application or other paper or document believed by him to be genuine and to have been made, executed or delivered by the proper party or by the proper authority, or authorities of the Union or Manufacturer, or by the party or parties purporting to have made, executed or delivered the same, and shall be protected in relaying and acting upon the opinion of legal counsel in connection with any matter pertaining to the carrying out of this agreement.

(g) Neither the trustee nor any of their successors, shall be liable or responsible in respect to any action taken or omitted to be taken pursuant to any vote cast by the trustees, or any of them, or any proxy or proxies appointed hereunder, nor shall the trustees or any successor or successors, be liable for any loss occasioned by any act of commission or omission done or omitted to be done in good faith by them, or any of them, or of any proxy or proxies that may be appointed hereunder, nor for the acts of any agent, attorney or employee selected with reasonable care by them, or any of them, nor shall any trustee be liable for any act of omission or commission of any other trustee, or of any proxy or proxies, that may be appointed hereunder.

(h) The Board of Trustees shall have the power and authority to make reasonable rules and regulations, not inconsistent herewith, to carry out the provisions of this agreement, and shall have the right to make and adopt their own rules of procedure and action.

(i) The Board of Trustees shall be entitled to incur reasonable expenses for the purpose of carrying out the provisions of this agreement, which expenses shall be payable out of the Fund.

(j) Any question or dispute which may arise out of the interpretation or performance of the terms of this agreement or any part thereof between the parties hereto shall be determined by the Board of Trustees, acting for this purpose as arbitrators under the laws of New York; and such decisions shall be final and conclusive for all purposes whatsoever.

ARTICLE XI. This agreement and the terms and conditions of the trust hereby established may be modified at any time by the Board of Trustees, upon its obtaining the written consent of both the Union and the Manufacturer.

ARTICLE XII. (a) In the collection of payments to be made by the Manufacturer under the terms of this agreement for work done for him in contract shops, his payments shall be determined by the number of garments cut, by the price paid by the Manufacturer to the contractor, and by the total weekly payroll of the contractor applicable to the garments of the Manufacturer.

(b) The Union or any agency designated by it shall receive the payments provided by this agreement to be made by the Manufacturer; the Union or its agency so designated by it shall collect the payroll sheets and such records as it may require of the Manufacturer as well as the weekly payroll records of the contractor; the Union or its agency so designated shall be in charge of paying the benefits under the provisions of this agreement from the Fund created thereby, all of which shall be subject to the supervision and control of the Board of Trustees.

(c) The expenses incurred by the Union or its agency so designated by it in carrying out the provisions of this agreement shall be payable out of the Fund.

ARTICLE XIII. This agreement may be extended or renewed by the joint written consent of the Manufacturer and the Union.

ARTICLE XIV. The trustees and the Chairman of the Board of Trustees, from time to time designated hereunder, shall evidence their acceptance of the trusts hereby created by executing this agreement or a duplicate thereof, and by such execution shall agree that the will in good faith and in all respects exercise the powers granted to them hereunder.

IN WITNESS WHEREOF the parties have caused this instrument to be duly executed the date first above written.

.....
Manufacturer.

By.....

AMALGAMATED CLOTHING WORKERS OF AMERICA

By.....

The Unemployment Insurance Plan of the General Electric Co.

In June of 1930, the General Electric Company announced an unemployment insurance plan which it submitted to its employees for approval. The plan was to be administered by separate works, and, when 40 per cent of the employees of any works voted in favor of it and by that act became members, it was put into effect for that works. Each member is to be assessed one per cent of his actual weekly earnings as long as these remain more than one-half of his full-time rate of earnings. To the sums thus contributed by the workers, the company adds an equal amount. A part of the fund which is thus built up is available for loans to employees in the specific works and the remainder is for benefits during unemployment suffered by men who are still regarded as employees of the company. Temporary lay-offs will in other words be partially compensated, but payments are not to be made to employees discharged for cause or those permanently laid off because of a reduction in the volume of business. No payment is made for the first two weeks of unemployment but after that a benefit will be paid to the employee equal to 50 per cent of his full-time weekly earnings. This payment is not, however, to exceed $20 a week nor is it to be made for more than 10 weeks a year. The maximum liability of the plan for a laid-off worker is limited to $200 a year.

Whether benefits are to be paid for part time workers as well as for those who are entirely laid off is not thoroughly clear and is probably a matter for later decision.

When after any period of three months, the expenditures from the fund are equal to the total contributions by the two parties, a state of emergency is automatically declared. *All* employees at the specific works, and not merely those who are members of the fund are assessed one per cent of their actual earnings. Members of the general managerial, sales, and engineering staffs who are attached to no particular works will also contribute a fraction of one per cent corresponding to the proportion which the employees of the works in question form of the total number employed in all the works of the company.

But as has been pointed out in the main body of the report, while in such an emergency all the employees of a given works must make their contributions, only those workers who have previously joined the plan are eligible for the benefits. This of itself will lead large groups of men, who would not initially vote to set up such a plan, to join it after it had once been started at a given works.

The plan is to be administered at each works by a joint board, "one-half representing and elected by the contributing employees and the other half appointed by the President of the General Electric Company."

According to an announcement of the company,[1] by the fifteenth of August, the plan had been accepted by the following percentages at these works:

Works	*Percentage of Employees Accepting*	*Works*	*Percentage of Employees Accepting*
Schenectady	63	Philadelphia	73
Lynn	84	Fort Wayne	73
Pittsfield	67	West Lynn	73
Bridgeport	92	Erie	82
Bloomfield	87		

The company then declared that over 75 per cent of the eligible employees had voted to participate in the plan and that the number was still increasing.

The detailed rules for the plan are printed below and are preceded by a statement of policies which the company has adopted to stablize employment and minimize unemployment.

POLICIES OF GENERAL ELECTRIC CO. AS REGARDS THE STABILIZATION OF EMPLOYMENT

When business is increasing:

1. Increase the working force by adding employees as slowly as possible.
2. Increase the number in especially busy departments by transfers from other departments.
3. Resort to overtime in particular departments and generally before increasing the working force.
4. Postpone plant renewal and maintenance work as much as possible, employing the men on regular production.

When orders begin to fall off:

1. Cease hiring at once.
2. Cut out all possible overtime and bring departments down to the normal week.

[1] *General Electric News*, August 15, 1930, p. 3.

3. Transfer people from slack to busier departments.
4. Stimulate the Sales Department to secure cooperation from customers and get business for future delivery.
5. Build standard apparatus for stock up to ..... months shipments, based on average of last three ears sales, adjusted to expectation of next two years.
6. See that stocks at all factory and district warehouses are brought up to this maximum.
7. Use men on maintenance and repair work, bringing the plant and equipment up to a high standard.
8. Cut the working week as generally and gradually as possible, by departments (down to 50 per cent of the normal week).
9. Proceed with construction of increased plant facilities previously planned, using our own men as far as possible.
10. Drop new employees with less than one year of service—single people with no dependents and who are most easily spared first—always with not less than one week's notice.
11. In accordancce with our custom established for some time, employees should be told whether it is a temporary lay-off due to lack of work, or permanent lay-off, and in every instance of permanent lay-off the usual compensation, if any, should be paid, depending upon the character of work, age and length of service.

GENERAL ELECTRIC EMPLOYEES UNEMPLOYMENT PENSION PLAN

Eligibility—Normal contributions

1. Any employee with continuous service with the Company of one year or more, is eligible for participation in the General Electric Employees Unemployment Pension Plan (hereinafter called the "Plan"), and may by his affirmative action participate in the Plan and by so doing agrees to pay into a trust created by General Electric Company for the benefit of said employees, to be known as General Electric Company Unemployment Pension Plan Trust (hereinafter referred to as the "Trust"), approximately 1 per cent of his actual weekly or monthly earnings for three years after the beginning of his participation, but only so long as such earnings are 50 per cent or more of his average full-time weekly or monthly earnings, or for such shorter or longer period as may be determined from time to time by the Administrators of the Plan. These normal contributions shall cease in abnormal times of unemployment, as outlined in Article 19 hereof. (The normal contributions may be deducted semi-annually from Supplementary Compensation of employees with 5 or more years of service.)

To simplify the collection of contributions, employees may be grouped according to earnings. Deductions will then be made as follows:

Class	Annual pay rates	Approximate weekly rates	Deduction per week	Deduction semi-annually from 5% Supplementary Compensation
A	Under $1000	$15.00	$.15	$3.90
B	$1000 to 1199	20.00	.20	5.10
C	1200 " 1399	25.00	.25	6.60
D	1400 " 1699	30.00	.30	7.80
E	1700 " 1999	35.00	.35	9.00
F	2000 " 2399	40.00	.40	10.50
G	2400 " 2999	50.00	.50	12.90
H	3000 " 3999	65.00	.65	16.80

2. The General Electric Company will contribute to the Trust an amount equal to that contributed by the contributing employees.

Amount allocated for various purposes

3. Three per cent of the normal contributions paid into the Trust by contributing employees and by the Company may be considered by the Trustees as available for payment to employees or former employees in need, as provided for in Article 10 hereof. The Trustees shall be authorized to make loans to employees as specified in Article II hereof to an amount not in The balance of the normal together with all emergency contributions so paid into the Trust and all interest shall be made available by the Trustees for unemployment payments as specified herein.

Organization and administration

4. The Plan may be adopted at any works and the Company will contribute as provided in Article 2, upon an affirmative vote of 60 per cent or more of the eligible employees of that works.
5. The General Electric Company will create the Trust, and renewals thereof, whose Trustees will be the custodians of the fund contributed by the employees and by the General Electric Company, and the General Electric Company will guarantee 5 per cent annual interest thereon. For two years after the inauguration of the Plan, the General Electric Company will pay the administration expenses, including time of men necessary for its administration. After this preliminary period, the expenses of administering the Plan will be determined and an agreement reached between the Company and the Administrators of the Plan as to a proper method for bearing such administration expenses.
6. The Plan will be administered in units of each works.
7. The administration of this Plan at each works shall be vested in a Board of not less than four nor more than sixteen Administrators, one-half of the number representing and elected by the contributing employees and the other half appointed by the President of the General Electric Company, with a Chairman elected by the Administrators from amongst themselves and the Chairman to have a vote. Such other officers shall be elected as the Administrators deem necessary.
8. At the larger works a number of committees may be appointed by the Administrators, dependent on the number of employees.

Payments, loans and repayments

9. No payments are to be made from the Trust for at least six months after its creation and thereafter only to employees who have made their normal payments for at least six months.
10. *Need.* Payments to any employee, or former employee of the Company who has been retired on old age or disability pension or disability relief, and who is in need, will be considered by the Administrators, and after investigation such action will be taken for such amount and for such a period as may be approved by the Administrators.
11. *Loans and Repayments.* (a) The Trustees shall be authorized to make loans to those who have been contributing employees for six months and have made their payments for six months into the Trust. Loans may be made by such Trustees to such contributing employees in amount not exceeding $200 each, with or without interest, as may be determined by the Administrators.

(b) Repayments on loans may be made to the Trust by deductions from the payroll, such deductions to begin when the contributing employee is given full time work by the Company, and to be in amount approximately equivalent to 10 per cent of his weekly pay, or an amount over such a period as may be determined by the Administrators. If a contributing employee who has been granted a loan leaves the employ of the Company, he shall repay his loan upon terms to be arranged by the Administrators.

12. *Unemployment.* The Administrators will define unemployment.
13. When a contributing employee receives notice of temporary lay-off from the Company, notice shall also go to the Administrators.
14. For the first two weeks of unemployment there shall be no payment from the Trust to a contributing employee.
15. After the first two weeks of unemployment, and subject to the approval of the Administrators, payment to a contributing employee will be made.

16. Payments made to a contributing employee shall be approximately 50 per cent of his average weekly or monthly earnings for full time, but in no case more than $20.00 per week.

17. Such payment to an individual contributing employee shall continue to the extent approved by the Administrators, but in no event longer than ten weeks in twelve consecutive months.

18. When a contributing employee is working part time because of lack of work and receiving less than 50 per cent of his average weekly or monthly earnings for full time, he will be eligible for payments to be made from the Trust amounting to the difference between the amount he is receiving as wages from the Company and the maximum he might be entitled to as outlined herein and as laid down from time to time.

When normal contributions cease

19. When contributing employees are temporarily laid off or working part time, and weekly payments made from the Trust for unemployment amount to 2 per cent or more of the average weekly earnings of contributing employees (as of the preceding quarter ended March 31, June 30, September 30 or December 31), the Administrators shall notify the Company of this fact and normal collections from contributing employees, as outlined in Article 1, shall cease. Furthermore, the Administrators shall notify the Company weekly thereafter the amount of the payments made from the Trust and the relation of such to the average weekly earnings of contributing employees.

Emergency contributions

20. The Company agrees, upon such notification, to make a statement that an unemployment emergency has arisen, and to put the following into effect:

The following emergency payments to the Trust shall begin and continue as long as payments from the Trust Fund amount to 2 per cent or more of the average weekly earnings of contributing employees, and until the total of the Trust is not less than 75 per cent of the previously attained maximum.

(a) From all those employed by the Company at the particular works and receiving 50 per cent and over of their average weekly or monthly full time earnings, approximately one per cent of the weekly or monthly earnings. This includes all the clerical and supervisory staff, including the highest officers of the Company connected with the particular works.

(b) All the General and District Commercial, General Manufacturing, Engineering and Administrative employees of the Company at all works and offices in the United States not on a particular works payroll, shall contribute their proportion of the percentage outlined in Paragraph (a) of this Article. Their proportion shall be determined by the ratio of the number of contributing employees of the works at which an emergency exists to the total number of eligible employees of all works of the Company (for example, if Schenectady should adopt the Plan and its contributing employees should be 20 per cent of the total number of eligible employees of all works of the General Electric Company, then 20 per cent of one per cent shall be deducted from the employees designated in paragraph (b) of this Article).

(c) The Company will contribute to the Trust an amount equal to that contributed by the employees as provided in this Article.

(d) The method of collection of emergency contributions shall be in accordance with instructions issued by the Comptroller of the Company.

Normal contributions resumed

21. After an emergency is over, the Administrators shall decide upon the renewal of normal payments into the Trust from the contributing employees and the length of time they shall continue, similar to those outlined in Article 1. After a contributing employee has received payments from the Trust in time of unemployment, the Administrators shall decide, after his return to work, whether he shall again be called upon to pay into the Trust, depending upon the condition of the Trust, the length of time he has been a contributing employee before receiving such payments, the amount of such payments and the length of time they shall continue.

Payments when employees leave or die

22. When a contributing employee leaves the Company for any reason (including discharge, retirement on old age or disability pension or disability relief) or dies, the Trustees will pay to him if living, or if not living to the beneficiary designated by him in writing and filed with the Company, or in default of such designation to his estate, an amount to be determined as follows:

From his normal contributions (Article 1) will be deducted any payments made to him (Articles 10 and 12 to 18). If, at the Works where he was employed, the Plan has a net operating loss (arising from other than receipts and repayments of normal contributions), his pro-rata share of the loss will then be deducted and the balance will be paid as above provided (in addition to the amounts payable in accordance with the regular old age or disability pension or disability relief or death benefit plans of the Company). No payment will be made until any loan to the employee has been repaid.

23. When amounts are paid in accordance with Article 22 hereof, an equal amount shall be paid to the Company.

24. Certification of the amount of the contributing employees' net payments, as outlined in Article 22, made by the Comptroller of the Company, shall be accepted as final.

25. All payments or loans from the Trust fund are contingent upon the availability of Trust funds at the time of application.

Interpretation—Amendment and termination of plan

26. Rules and regulations governing receipts and payments under the Plan will be made by the Administrators, and their rulings will be final. After the Plan has been in operation for two years, the Administrators may decide in view of their experience, what the normal amount to be collected from a contributing employee shall be, the percentages to be set aside for payments and loans as herein provided, the amount to be paid to contributing employees for unemployment, and the amount of loans that may be made and the terms under which repayments shall be made.

27. This plan may be modified, amended or changed at any time by recommendation of a two-thirds vote of the Administrators, at each participating Works.

28. If, because of enactment of any law, state or federal, or for any other reason, it appears to the Company that it would not be good policy to continue its support of the Plan, it will confer with the Administrators and will give them at least 400 days notice of its decision as to abandonment of its support of the Plan.

29. The employees, acting through their Administrators, may decide to continue the Plan and Trust without the support of the Company as herein provided, in which event the Company will be entitled to receive only one-half the amount that would have been paid to participating employees as outlined in Article 22.

30. If the Administrators, elected by the employees, decide to abandon the Plan and two-thirds of the contributing employees concur, each contributing employee will be paid the same amount he would receive if he then left the Company (Article 22). An equal amount will be paid to the Company (Article 23) less the amount, if any, the Company has received in accordance with Article 29. Any balance then remaining to the credit of a Works unit shall be applied by the Trustees to a purpose

or purposes recommended by the Board of Administrators as beneficial to the employees at that Works.

4. The Dismissal Wage

Payment of a dismissal wage to workers losing their jobs because of lack of work is increasing among employers. This may take the form of full or part pay for a stipulated period of time or cash payments in a lump sum usually based on earnings and length of service.

The Columbia Conserve Company pays to discharged employees a dismissal wage of two weeks' salary. The Dennison Manufacturing Company provides, that in long-continued depressions discharged employees, other than those employed on a temporary basis, are given two weeks' notice or two weeks' salary. The Consolidated Gas, Electric Light & Power Company of New York provides for all workers, except those on an hourly basis, a dismissal wage amounting to 1 week's pay for service from 6 to 9 months, 2 weeks' pay for 9 months to 5 years and 1 month's pay for employees with over 5 years' service. Employees of the New York Edison and the United Electric Light & Power Company, who are released or laid off or who resign by request, receive notice or pay in lieu of notice at the rate of one week for each full year of service with the maximum of two weeks. The Firestone Tire & Rubber Company pays one month's salary to dismissed employees having from 5 to 10 years' service and 2 months' salary to those having from 10 to 15 years' service.

A. Nash Company also cut down its force of cutters by the payment of a $300 dismissal compensation to each. Volunteers were called for when the reduction was made. In New York City a clothing firm dismissed 80 employees. The firm contributed $3,000 and the employed workers in the plant contributed 2 days' pay. The fund was distributed by a committee of workers among those dismissed according to their financial need within the limits of $50 minimum and $200 maximum.

When the United States Rubber Company closed two of its Connecticut plants it paid a dismissal wage of one week's pay for each year of service to employees with 15 or more years' service who were not eligible for pensions, and to all employees 45 years of age and over with 10 or more years' service, effecting a change in the process of manufacture involving the elimination of a certain department notified their employees as follows:

1. We do not expect to be able to find jobs for employees who have been with the company for less than one year.
2. Jobs will be found for as many employees as possible either within the plant or in other plants of the corporation.
3. Employees who are not placed will be given half pay for as many months as they have years of service but not more than six months and with a minimum of $50 per month.
4. No special payment as outlined in paragraph 3 will be given to men who are placed in any of our plants.
5. Any employee who accepts a position in our plants, but decides within a period of 30 days that for some reason he is not able to continue, will receive the payments as outlined above.

6. Continuous service with full insurance will be carried for the period mentioned in paragraph 3 for all men who are not placed in our plants.
7. If an employee gives up a job and receives payment as above and then starts with the company later his special payments will cease and he will not receive them again if he should leave the company's employ a second time.
8. If requested, the company will be glad to assist in placing men with other companies if positions cannot be found in our plants.

5. A Proposal for a Dismissal Wage Act

By Ernest G. Draper, *Vice-Pres., The Hills Brothers Co.*

1. A worker, dismissed for misconduct, gross negligence or gross inefficiency shall not be eligible for a dismissal wage.
2. A worker, dismissed for lack of work, shall receive one month's wages, either in a lump sum or in nine weekly instalments, according to the preference of the employer. The one month's wages shall be equivalent to 4½ weeks of the average weekly wages of the employee while working full time for three months preceding his lay-off.
3. If a worker claims he has been dismissed unfairly for any of the causes mentioned above (except for lack of work) he may appeal to the Industrial Commissioner of the State. It will be the duty of the Industrial Commissioner to appoint Committees to decide such cases. These Committees shall consist respectively of three persons, one from the State Department of Labor, one from the Company involved and one chosen by these two. The decisions of such Committees shall in each case be final.
4. No worker shall be entitled to a dismissal wage under this Act who has not been an employee of the same or constituent Company for at least six months prior to his lay-off.
5. In the meaning of this Act, a lay-off for lack of work exists when a worker is dropped from the pay-roll altogether or is receiving less than 50% of his normal, average weekly wage for more than three weeks in succession.
6. If an employer who is about to lay off an employee for lack of work secures or helps to secure for that employee a job at or approximately the same wage which the employee has been receiving and this job is in other respects satisfactory to the employee, then the original employer need pay to the aforesaid employee a dismissal wage of only two weeks' average weekly wages instead of one month's wages computed as hitherto specified, providing the said employee is given one week in which to determine whether the new job is satisfactory. The continuance of the said employee at work at the new job for more than one week will constitute final evidence that the new job is satisfactory.
7. For employees who have been in the employ of the same or constituent Company continuously for more than five years but less than ten years, the dismissal wage shall be equivalent to two months' wages, computed as hitherto specified and paid in one lump sum or in nine equal weekly instalments, according to the preference of the employer.
8. For employees who have been in the employ of the same or constituent Company for more than ten years but less than twenty years the dismissal wage shall be equivalent to three months' wages, computed as hitherto specified, and paid in one lump sum or in twelve weekly instalments, according to the preference of the employer.
9. For employees who have been in the employ of the same or constituent Company for more than twenty years, the dismissal wage shall be equivalent to six months' wages, computed as hitherto specified, and paid in one lump sum or in twenty-four weekly instalments, according to the preference of the employer.
10. In order to defray the expense of a dismissal wage to workers, a dismissal wage fund shall be established in every company operating under this Act. This fund shall be made up of equal contributions from both employers and employees. Employers shall contribute annually to the fund at

the rate of not more than 1% of the total pay-roll for each calendar year. Employees shall contribute to the fund monthly at the rate of not more than 1% of their wages during each month. If, in any one year, the withdrawals from the fund are greater than the combined total of the fund, the deficit shall be made up by the employer.

11. No provisions in this Act shall apply to Federal, state, city or town employees working within or without the State nor to any workers in the State other than those engaged in manufacturing, mining, distributive, transportation, selling or mercantile pursuits.

12. If any question shall arise in the administration of this Act which is not specifically covered in the Act, the question shall be brought to the attention of the Industrial Commissioner of the State and he or she shall have full power to decide each question and his or her decision shall be final.

B. Foreign Systems of Unemployment Insurance.

6. The Ghent System of Subsidized Voluntary Unemployment Insurance

The Ghent system is one of state subsidies for voluntary insurance against unemployment. It differs in this respect from the compulsory plans of England and Germany. It differs also from them in the fact that the employers do not make any contribution —these coming solely from the workers and the government.

As its name implies, this system was first introduced in Ghent, Belgium in 1900 and was adopted by many other municipalities in that country. The system was in its origin therefore a local one, but since the war the national government has become the dominant agency. On the one hand, it grants subsidies to the municipalities, fixes the conditions of benefit, and the standards to which the funds must conform, while on the other, it directly subsidizes national unemployment insurance funds established by various trade-unions. These are more important than the strictly local funds. This is partially shown by the fact that while there were only 128 purely local associations in 1927, there were no less than 1,243 local branches in the 33 national trade union funds. The state subsidy amounts to two-thirds of the contributions paid by the members of the fund and of this subsidy, the central government now furnishes by far the major part.

No insured person in a voluntary society is eligible to receive benefits until he has been a member for at least a year. The benefits cannot be paid to members of societies (1) who are incapable of work, (2) who are on strike or are unemployed because of a strike which they encouraged or from which they would profit, (3) who have been discharged from their previous employment and who refuse to accept new employment which is suitable to them and which has the customary working conditions of the neighborhood, (4) who are not seeking work. A brief waiting period is imposed and while the rates of benefit vary from fund to fund, no one can normally receive more than two-thirds of his earnings in this form. Slight additions are made, however, for dependents so that it is possible for a father with four dependent children to receive up to three-fourths of his usual earnings.

A national reserve or emergency fund has also been created to help underwrite the possibility that specific funds may not be able

to meet their liabilities. After due investigation, this reserve fund will meet the payments. Furthermore, if a member has exhausted his claims for benefit in any fund and is still in want, the emergency fund will pay added benefits up to 30 grants a year. The benefits granted under both of these conditions are fixed at the rates of the particular fund itself, but in no case can they exceed 9 francs a day for heads of families and for men over 25 years and 7 francs for unmarried men under 25 and for all women who are not heads of families.

In addition to all this, the National Emergency Fund pays family allowances to the dependents of those who are receiving standard benefits from the individual funds. These consist of 3.5 francs for wives who are doing the housework and 3 francs for all children under 14 and those who, between the ages of 14 and 16, are still attending school.

These grants of the National Emergency Fund are given only on condition that the communes agree to repay 10 per cent of the expenditures upon their citizens and the approved societies 15 per cent of the expenditures upon their members.

In practice the approved insurance societies have been almost wholly confined to the trades-unions. The membership in these approved funds has been as follows:

Year	*Membership in 000's*	*Year*	*Membership in 000's*
1921	688	1926	598
1922	705	1927	611
1923	654	1928	629
1924	655	1929	633
1925	607		

It would seem therefore that under the subsidized voluntary plan, the numbers protected are limited by the extent of trade unionism. When the latter declines, as in 1926, the numbers in the unemployment funds also must necessarily decrease. The forces which restrict the growth of unionism, in practice, also limit the area of protection against unemployment. The following table shows the approximate total contributions to these funds from 1925 to 1927 inclusive. The sums granted by the communes include not only the outright subsidies but also the additions paid to the various societies.

Income in Thousands of Francs of Specific Funds

Source of Contribution	*1925*	*1926*	*1927*
1. Contributions of Members	12,913	13,611	17,935
2. Subsidies			
(a) State	5,231	8,114	7,830
(b) Provinces	1,336	618	1,445
(c) Communes	4,601	4,595	7,292
(d) Miscellaneous	749	925	2,230
Total	24,830	27,864	36,731

The average rate of contributions and of benefits varied widely between societies. Thus in 1927 the annual contributions ranged from 55 francs per member among the tobacco workers to 2.45 francs among the public service workers. The benefits varied from 78.5 francs per insured member among the leather workers to 1.2 francs among the paper-makers. The averages for the largest groups were as follows:

	Contributions	*Benefits*
Textiles	37.5 francs	34.5 francs
Metals	24.2 "	38.0 "
Mining	11.4 "	14.5 "
Mixed groups	35.4 "	52.9 "

In addition to all these amounts, there should be added the expenditures from the National Emergency Fund. These have been as follows:

Year	*Expenditures in 1000 francs*	*Year*	*Expenditures in 1000 francs*
1921	128,904	1926	10,423
1922	43,523	1927	16,579
1923	5,902	1928	11,870
1924	4,172	1929	14,287
1925	7,932		

It will be seen that the expenditures from this central emergency fund were indeed great during the unemployment crisis of 1921–22, but that they then decreased. During the years from 1925 to 1927 inclusive they ranged from 30 to 40 per cent of the contributions made to the voluntary funds.

If all of the sources are taken together, it will be seen that the various governmental agencies contribute appreciably more than half of the total available sums. In 1925, for example, they contributed slightly over 60 per cent, in 1926 nearly 66 per cent and in 1927 slightly over 66 per cent.

It is also interesting to note that in recent years, the major part of the payments from the National Emergency Fund have gone to pay for the family allowances to the unemployed workers.

In Denmark, the system of subsidized voluntary insurance has come to a somewhat similar final result through a different process of evolution. In Denmark because of the comparative strength of the central government it, rather than the communes, was the agency first to take the initiative. The subsidy of the national government was to be equal to one-third of the contributions paid in and the communes were permitted to add a further contribution of one-sixth, making the total possible normal contributions from the government one-half that of the members.

The funds were required to separate their resources for unemployment from their other trade union funds. Local funds were compelled to admit any qualified worker in the locality and individual funds, any one in that industry. The usual eligibility rules were imposed and it was provided that the benefits should

not exceed two-thirds of the average wage nor extend for more than 70 days a year. A waiting period of 6 days was required and no member could receive benefits until he had paid contributions for at least a year. By 1914, approximately 120,000 workers were members of approved funds.

It was found that these measures were inadequate in periods of great unemployment. As early as 1908, the societies were permitted to continue paying benefits to those who had already received the maximum allowance. In 1919, the contribution of the central government was increased to one-half the contributions by the members. In addition, if societies set up reserve funds to make emergency payments to those who had exhausted their claims to benefit, then two-thirds of these sums would be refunded by the state and one-third by the communes. This last contribution by the communes was made obligatory. The ratio of grants by the state and commune authorities is now graduated according to the average earnings of the members of the various funds and is as follows:

Average Annual Earnings	Percentage of Contributions of Members		
	State	*Communes*	*Total*
0–1500 kronen	40	30	70
1500–2000 "	35	30	65
2000–2500 "	30	25	55
2500–3000 "	25	20	45
3000–3500 "	20	15	35
3500–4000 "	15	10	25
Over 4000 "	10	5	15

In 1924 there were 67 approved funds with a total membership of approximately 256,000. The total receipts of the funds were 24 million kronen and the total expenditures 19.2 million kronen.

7. Unemployment Insurance in Great Britain [1]

The unemployment insurance bill of 1911 was passed together with health insurance largely as the result of Mr. Lloyd-George's influence. It was an experimental scheme limited to about two and a quarter million workers in industries exposed to seasonal and cyclical fluctuations, such as building, construction of works, shipbuilding, engineering, construction of vehicles, iron foundry, and certain kinds of saw-milling. Initially, workers and employers paid equal contributions of 2½d per week with a state contribution equal to one-third of their combined total. After a waiting period of one week, weekly benefits of 17 shillings for men and six shillings for women were paid. No person could however draw benefits for more than 15 weeks in any year or for more than 1 week for each 5 contributions.

Trade unions could pay out the state benefits if they added one-third to the sums and conformed to the rules. By 1920, there were approximately 1,350,000 who were paid in this manner.

[1] Prepared by Paul H. Douglas and Aaron Director.

While the above features of the 1911 act have been retained, certain others have been modified. Among these were (1) refunds to employers who were able to stabilize employment; (2) refunds for short-time during periods of depression; (3) subsidies to voluntary plans (which became unnecessary with the universalization of the plan in 1920).

During the years 1912–1918, unemployment was of course low, and surpluses accumulated. In 1916 the act was extended to munition workers, raising the total number covered to about 4 millions. The act was not universalized during the war or during 1919, however, because many of the unions believed that they would have little permanent unemployment after the war.

In December, 1918, the first departure from insurance took place when the out-of-work donation was granted by the government, not only to members of the fighting forces, but to all civilian workers as well. The administration of these claims was given to the Employment Exchanges, and in all £62,000,000 were paid out, of which approximately one-third was for civilian benefits.

In 1920, the unemployment insurance was extended to all workers save those in agriculture, domestic service, permanent employees on the railways and in the public service. The total contributions were increased and benefits paid at 15 shillings a week for the men, 12 shillings for women and half rates for boys and girls. No claim was to be eligible until at least 12 contributions had been made, the maximum period of benefit in a year was fixed at 15, and every week's benefit was to be matched by 6 contributions.

Almost immediately after the act went into effect, the depression of 1920–21 set in, and by the latter year, 17 per cent of the insured were unemployed. The 22,000,000 pounds of surplus previously accumulated under the partial system speedily melted away and reserves could not be accumulated in the midst of such unemployment. Furthermore, it was impossible to enforce the rule that 12 prior contributions must have been made or the one-in-six provision.

Many amendments were made to the act during the following years. The number of weeks in a year for which benefits could be paid were gradually increased. First, 16 weeks out of 35 were allowed, then 22 out of 35 with subsequent changes. Appeals for "uncovenanted benefit" beyond these periods were passed upon by special committees, but except when the Labor Party was in power in 1924, were treated as a privileged grant and not as a statutory right.

In 1921 allowances were added for dependent wives and children of the unemployed and these were made a permanent feature of the system in 1922. The allowances for a wife now amount to 5 shillings weekly, and are 2 shillings for children.

To meet the increased benefits and the heavier burden of unemployment, the contributions were materially increased. In 1926, the total weekly contributions for a worker from all three parties

were 1s. 9d. The share of the state however has been decreased from approximately one-third to nearer one-fourth. In view of the extended benefits which are granted it is probable that the contributions of the state should have been greater.

Even with these higher rates of contributions, the volume of unemployment has been so great as to give rise to deficits. Up to July 1926, £23,000,000 were borrowed from the state and by 1928 this had been increased to nearly £30,000,000.

The claims for extended benefit, while numerous, are closely checked and there does not seem to have been appreciable administrative abuse. Although the 1920 act permitted special unemployment schemes by industry, the industries with a high volume of unemployment did not wish to have their burden increased by the contracting out of industries where the volume was low, and a further extension of this method is now prohibited.

The English system is not a "dole" as it is commonly called. It has done good work although it possesses many faults. Maintenance, however, is not enough, and a re-distribution and retraining of the labor supply seems to be necessary.

8. Unemployment Insurance in Germany

Although social insurance has been very highly developed in Germany, it was not until 1927 that a nation-wide system of compulsory unemployment insurance was adopted. About 17 million workers are covered by this act, including about a million of the less regularly employed agricultural laborers.

The entire burden of financing unemployment insurance and the employment exchanges is nominally placed upon the employers and workers. The government is to participate only in times of great unemployment when it is to make loans and emergency grants. Four-fifths of the latter are to come from the Federal government and one-fifth from the local authorities. The contribution by workers and employers amounts to 3 per cent of the wage in each class and the employers deduct the workers' share and forward the total amount to the local sickness insurance agency.

Benefits are of two kinds: (1) standard—which are paid for by workers and employers, and (2) emergency, which are paid for by the government.

Various rules are laid down governing the definition of unemployment. At least 26 weeks' work in an insured occupation during the preceding year is required, and a waiting period of 7 days is imposed. Standard benefits are not to extend beyond 26 weeks. For paying the benefits, the workers are divided into 11 classes according to their standard weeks' earnings. Those in the higher wage groups get a larger total benefit but a smaller percentage. When the weekly income is less than 10 marks, for example, the benefit paid is 75 per cent, but when it is 60 marks or more the percentage is 35. Allowances are also added for dependents up to a total of 5, but the sum of the benefits plus allowances is not allowed to exceed 80 per cent of earnings and for all save the very

lowest paid classes is from 50 to 70 per cent. As in England, the system is administered through the employment exchanges where the unemployed are required to register at least three times a week.

Emergency benefits are given to those who have exhausted their benefits and are still in want or who had not been able to pay their 26 contributions during the preceding year. Seasonal benefits have since been added for agriculture and building.

The control over both the employment exchanges and unemployment insurance has been given to bodies representing workers and employers.

In practice the volume of unemployment has been heavier than was expected and the government has been compelled to pay substantial sums for emergency benefits. The deficit for 1929 for example was over 300 million marks.

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